













THE  
BOMBAY QUARTERLY REVIEW.

---

No. II.

*APRIL,*

1855.

---

BOMBAY:  
SMITH, TAYLOR AND CO.  
LONDON: SMITH, TAYLOR AND CO., 65, CORNHILL.  
NEWCASTLE:  
W. & A. G. G. G.







# ADVERTISEMENTS.

MESSRS. SMITH, ELDER, & CO.

Have the pleasure to announce to their friends constituents, and the public generally, of our Indian Presidencies and the Eastern Settlements, that they have made arrangements to carry into execution a design which they have long contemplated, for the Publication of a **FORNIGHTLY JOURNAL OF INTELLIGENCE FOR INDIA AND THE EAST**, and they trust that the antecedents of their Firm will be sufficient guarantee for the intelligence and liberality with which the undertaking will be carried out.

*On the 9th of July will be published the First Number of*

## **"THE OVERLAND MAIL"**

**A FORTNIGHTLY SUMMARY of INTELLIGENCE for INDIA and the EAST.**

*For the route to India by each Mail, via Marseilles*

The "**OVERLAND MAIL**" will be a bi-monthly compendium of intelligence, compiled with especial reference to the wants of all classes in the Indian community. It will contain an *imprevue* of the Political Events of the past fortnight; copious Military and Naval Intelligence; a comprehensive Commercial and Monetary Article; the most interesting Legal Reports; and an Abstract of Sporting Events. It is proposed, also, to give, in addition to others on Special Reviews of the most important New Works and in account of the Progress of Science and Art, and a Report on all the noticeable Publications of the fortnight, and a short description of New and Useful Inventions, together with a Chapter of Literary, Artistic, and Social Chat-chat, embodying the current *ou-dits* and varied gossip of Society and the Clubs.

In addition to these ordinary features of Political, Military, and Miscellaneous Journal, the "**OVERLAND MAIL**" will be distinguished by the copiousness and accuracy of that description of original intelligence affecting the **INDIAN SERVICES** and Community, which, although it does not find its way into the English Journals, is perhaps of more interest and importance to the Indian reader than any other description of News.

With a view of rendering the "**OVERLAND MAIL**" in this *aspect* as profitable as possible to the community for which it is compiled, MESSRS. SMITH, ELDER, & CO. have secured the services of a gentleman of Editorial experience, both in India and in England, who is the Author of several works of high character and popularity on subjects connected with Indian History and Politics, under whose superintendence the journal will be produced.

Subscriptions to the "**OVERLAND MAIL**," including postages, will be twenty-four shillings, or Twelve Rupees, per annum, payable in advance.

*Subscribers' names and remittances may be sent direct to*  
MESSRS. SMITH, ELDER, & CO., 65, CORNHILL, LONDON, E.C.

*Or to their Branch Firm,*

MESSRS. SMITH, TAYLOR, & CO., BOMBAY.

*London, Cornhill, May 1, 1855.*

# SMITH, ELDER, and Co.

Have the satisfaction of intimating to their FRIENDS and CONSTITUENTS, and the MEMBERS of the MILITARY and CIVIL SERVICES, that they have made arrangements for extending the scope of their business, by adding to it the various branches of an

## EAST INDIA ARMY & GENERAL AGENCY.

In making this announcement, S E & Co., whilst respectfully soliciting the support of their Friends and Constituents, and the Indian Community generally, for this New Branch of their business, venture with confidence to express a hope that they will not be less successful in affording satisfaction to their Agency Constituents, than their extensive and rapidly-increasing correspondence justifies them in assuming that they have hitherto given in other departments.

SMITH, ELDER, & Co.'s East India and General Agency will in future comprise—

### THE MONETARY AND BANKING DEPARTMENT,

For the Receipt and Remittance of all descriptions of Pay, Pension, Fund Allowances, Purchases, and Sales of Government Stock and other Securities, and all other kinds of Financial Transactions appertaining to this department.

S E & Co will be happy to act as Bankers for their Constituents, either in this country or abroad, and a fixed rate of interest will be allowed on deposits under the usual conditions.

### THE PERSONAL AGENCY DEPARTMENT.

In this department S E & Co will at all times have pleasure in giving their personal attention to the wishes and requirements of their Constituents. Their services will be available for the clearance and transmission or warehousing of Passengers' Baggage arriving by steamer at Southampton or by sailing vessels; and, when intimation is previously given them, they will make all requisite preparation for the reception of their Constituents on arrival in England, and will secure for them either temporary or permanent house accommodation in London or the vicinity. They will also afford every attention to Ladies and Families, who call, on landing, to be freed from all trouble and inconvenience, and they will be happy, if desired, to give such advice and assistance in effecting arrangements for the education of the children of their absent Constituents.

S E & Co's Constituents proceeding to India, either by ship or the overland route, may have their berths selected and their passages secured, without trouble or additional charge, and all needful information regarding the expense and relative advantages of the respective routes will be afforded.

S E & Co will at all times be happy to receive and despatch Letters for their Constituents, whether in England or in India; and to forward Parcels by the Overland Route, or undertake the Shipment of Goods via the Cape of Good Hope, and as small parcels despatched by S E & Co are enclosed in large packages consigned to their Agents, they are enabled to offer their Constituents the advantage of considerable reduction of expense in the transmission of such parcels.

### THE SUPPLY DEPARTMENT.

For the execution of orders for every description of MILITARY APPOINTMENTS and ~~MESS SUPPLIES~~ MESS SUPPLIES, including Wines, Provisions, Plate, Glass, China, &c, Arms, Accoutrements, Band Instruments and Clothing and all kinds of personal requisites.

Orders entrusted to S E & Co for execution, will receive prompt and careful attention, and every article supplied by them will be selected with judgment, from the stocks of the best manufacturers, and with a due regard to economy.

### TERMS.

1 No Annual Subscription to the Agency is required, but Messrs Smith, Elder, and Co will consider their services available to all their Constituents, among whom will be included Subscribers to the "OVERLAND MAIL."

2 Orders for goods, when required on credit, should be accompanied by satisfactory references.

3 No commission will be charged on Regimental orders, and a discount will be allowed when they are accompanied by remittances.

4 No commission will be charged on the execution of orders from Private Individuals when accompanied by remittances, and a discount will be allowed. When orders from Private Individuals are not accompanied by remittances, a commission will sometimes be charged.

*London, Cornhill, March, 1855.*

# NORTH WESTERN BANK OF INDIA.

Registered under Act XLIII. of 1850.

*Head Office, No. 4 Council House Street, Calcutta :*  
JOHN O'BRIEN TANDY, ESQ., Manager & Secretary.

## *Branches.*

LONDON.—Gresham House, Old Broad St : Robt. McKim, Esq., Agent.

MUSSOORIE.—N. W. Provinces : Major Wm. Freeth, Agent.

BOMBAY.—No. 1, Forbes Street : Jos. Rich, Esq., Agent.

SINGAPORE.—No. 19, Malacca Street : David Duff, Esq., Agent.

**T**HE Bombay Branch of the NORTH-WESTERN BANK OF INDIA makes Advances on the hypothecation of Company's Paper, Bank Shares, Staple Goods and other approved collateral security, and conducts the ordinary business of a Banking Agency in all its branches, including the sale and purchase of Government and other securities, upon the usual terms.

Drafts granted on London, Calcutta, Mussoorie, Simla, Agra, Delhi, Meerut, and other places.

Floating Deposits are received available on demand, and Money received at interest in accordance with the following

## INTEREST DEPOSIT RULES :

*Namely :—*On all sums deposited for two months' certain, and thereafter requiring two months' notice of withdrawal, at the rate of 3 per cent per annum.

On all sums deposited for three months' certain, and thereafter requiring three months' notice of withdrawal, at the rate of 4 per cent per annum.

On all sums deposited for nine months' certain, and thereafter requiring six months' notice of withdrawal, at the rate of 6 per cent per annum.

The Interest on the above deposits is compounded half yearly, on 30th June and 31st December, of each and every year, and is payable to Depositors upon presentation of the Deposit Receipt. The amount of Principal together with the Interest can likewise be availed of without the required notice, if taken in the Bank's Bills on London.

The Bank reserves to itself the right of closing these Deposit Accounts or modifying the terms thereof on giving three months' notice of its intention to do so.

The Agent is authorised to undertake the safe Custody of Government Paper, Bank Shares and other Indian Stocks, Free of all charge, and to draw the Interest and Dividends on the same as they fall due on the following terms:—

If to be remitted through the Bank, without charge.

If payment to be made in India, a Commission is charged of 4 As. per Cent.

On returning Government paper or Share Certificates out of Safe Custody, or if sold on paying the proceeds of such sale in India, a Commission is charged of..... 4 As. per Cent.

On the sale of Government Paper or other Stock, the proceeds whereof are to be remitted through the Bank,..... Free of charge.

The Bank likewise remits the Interest and Principal of fixed deposits (when previously declared for transmission to England) at an Exchange of 1 Farthing above the advertised rates of the day.

J. RICH, Agent.

No 1, Forbes' Street, Fort,

Bombay, February, 1855.



# LONDON AND EASTERN BANKING CORPORATION.

*Incorporated by Royal Charter.*

**LIMITING THE LIABILITY OF EACH SHAREHOLDER TO THE PROPORTIONATE AMOUNT OF HIS SHARES IN THE CORPORATION.**

Subscribed Capital, £500,000—Paid up Capital, £230,000

## HEAD OFFICE,

36 King William Street, City, London

Manager.—JOHN EDWARD STEPHENS, Esq

Secretary.—JAMES BLACK, Esq

Calcutta Branch—J. MACKELLAR, Esq, Manager

H. D. TURNBULL, Esq Sub-Manager

Bombay Branch—JOHN JAMIESON, Esq Manager.

C. F. BARCLAY, Esq Sub Manager

The Directors have great pleasure in informing their fellow Shareholders in India, that they have procured a Royal Charter of Incorporation, conferring on the Bank the fullest powers, and enabling it to carry on every description of banking business in London, as well as in the East Indies, and in the Eastern Colonies of the empire  
London, 20th January 1855. JOHN E STEPHENS, Manager

## BOMBAY BRANCH

The Bombay Branch of this Corporation transacts business on the following terms—

### Interest allowed.

(On Deposits ranging from Rs 1,000 to Rs 50,000)

|                        |   |     |                         |    |   |    |   |    |
|------------------------|---|-----|-------------------------|----|---|----|---|----|
| Payable on demand..... | 3 | ct. | Payable at 3 m's notice | 4  | 3 | ct | 3 | an |
| " at 1 m's notice.     | 3 |     |                         | 6  |   |    |   |    |
| " 2 "                  | 3 |     |                         | 12 |   |    |   |    |

The Interest on these deposits is payable half yearly; viz. on 30th June and 31st Dec  
Deposits may be withdrawn without the usual notice, & taken in the Bank's Bills on London at the advertised rates of the day.

The sale and purchase of Stock negotiated, and Interest and Dividends realized  
Every facility is offered by the Bank to Officers and parties in India, for the purpose of enabling them to make periodical payments to parties in England, on their family or other accounts.

No Cheques cashed nor money received under Rs 10

### Discount.

|                              |   |   |     |                               |    |   |    |   |     |
|------------------------------|---|---|-----|-------------------------------|----|---|----|---|-----|
| On Government Bills .....    | 7 | 3 | ct. | On Private Bills at 2 months' | 10 | 3 | ct | 3 | an. |
| On Private Bills at 15 days. | 8 |   |     | " 3 "                         | 11 |   |    |   |     |
| 1 month                      | 9 |   |     |                               |    |   |    |   |     |

Private Bills secured by Government Paper will be discounted at reduced rates  
Rebate on uncovered Bills is allowed at Government rate only.

### Cash Credits.

Granted on Government or other approved Securities, for sums ranging from Rs 5,000 to Rs 30,000, at 7 and 9 per cent per annum respectively

### Exchange.

|                             |     |   |   |    |                             |    |   |    |    |
|-----------------------------|-----|---|---|----|-----------------------------|----|---|----|----|
| Bills on London at 6 ms' at | 2s  | 0 | 1 | d. | Bills on London at 1 m's at | 2s | 0 | 1  | d. |
| " 3 "                       | 2s. | 0 | 1 | d. | " 1 day's at                | 2s | 0 | d. |    |
| " 2 "                       | 2s  | 0 | 1 | d. |                             |    |   |    |    |

### Commission.

On the purchase or sale of Government or other Securities, one quarter per cent on the amount invested or realized, and on the collection of Bills payable in Bombay, one half per cent and postage.

Shareholders have the option, on giving timely notice, of receiving dividends at the Bank in London, or at any of the Agencies, free of charge, at the same time as Shareholders in each respective locality.

The Bank grants Drafts on Calcutta, Agra, Simla, Delhi, &c.

By Order of the Directors.

JOHN JAMIESON, Manager, Bombay Branch.

17, Church Street, Bombay, April, 1855.

## LONDON AND EASTERN BANKING CORPORATION.

**R**EFERRING to the Government Notification No. 5., dated Fort William, Financial Department, 24th January 1855, announcing the intention of Government to abolish the authority hitherto granted to the Government Agent at Fort William, and to the Accountants General and the Sub-Treasurers at Fort Saint George and Bombay, to act as Agents on behalf of Proprietors of Government Securities, or Shares in the Capital Stock of the Banks of Bengal, Madras or Bombay respectively, the LONDON AND EASTERN BANKING CORPORATION will receive charge and undertake the safe custody of Government Paper, and Bank Shares from the Agent, and realize the Interest when due, and Dividends as declared, on the following terms:—

1. When the proceeds of Government Paper, and Bank Shares sold, or of Interest and Dividends realized, are remitted by the Bank's drafts on the Head Office in London, or on the corresponding branch at Calcutta, no Commission will be charged.

2. If otherwise paid, and when the Paper or Shares are delivered over, the charge for Commission will be  $\frac{1}{2}$  per cent.

3. The Bombay Agency of this Corporation will also receive remittances for investment in Government Securities, Bank of Bombay Shares, and other Stock, and will negotiate the sale of the same, and charge a commission of  $\frac{1}{2}$  per cent

**JOHN JAMIESON,**  
*Manager,*

London and Eastern Banking Corporation,  
Bombay, April 1855.

Bombay Branch

## INDIA AND LONDON LIFE ASSURANCE COMPANY.

**T**HE Scale of Premiums of this Company are now greatly reduced, and the Lives of healthy persons, Civil or Military, in any part of the world, are assured at as low rates of Premium as can be taken consistently with perfect security.

Extract from the Tables of Annual Premiums required for an Assurance of Rs. 1000 or £100 at the Reduced Rates.

| Civilians. |           |              |             | Military, and Naval. |           |              |             |
|------------|-----------|--------------|-------------|----------------------|-----------|--------------|-------------|
| Age.       | One Year. | Seven Years. | Whole Life. | Age.                 | One Year. | Seven Years. | Whole Life. |
|            | Rs.       | Rs.          | Rs.         |                      | Rs.       | Rs.          | Rs.         |
| 18         | 18        | 20           | 27          | 18                   | 24        | 26           | 32          |
| 25         | 22        | 23           | 31          | 25                   | 28        | 29           | 36          |
| 30         | 25        | 26           | 34          | 30                   | 31        | 32           | 39          |
| 35         | 29        | 30           | 38          | 35                   | 34        | 36           | 43          |
| 40         | 31        | 33           | 43          | 40                   | 37        | 39           | 47          |
| 45         | 35        | 37           | 48          | 45                   | 41        | 43           | 52          |

Prospectuses and every requisite information obtained on application to the Agents of the Company.

**GREY & Co.**

# EMPEROR LIFE ASSURANCE SOCIETY

CAPITAL £100,000. IN SHARES OF £5 EACH.

Incorporated by Act of Parliament, 7 & 8 Vic. Cap. 110.

*Offices.*

CANNON STREET WEST, LONDON.

*Bombay Agents.*

DUNLOP & CO.

*The Policies issued by the Society are absolutely indisputable, and are not forfeited through the inability of the assured to continue the payment of their premiums.*

*Annual Premium for Assuring 1,000 Rupees, or one hundred Pounds Sterling.*

## WHOLE LIFE ASSURANCE.

| Age next Birth-day. | Civil.        |                  | Military and Naval |                  |
|---------------------|---------------|------------------|--------------------|------------------|
|                     | With Profits. | Without Profits. | With Profits.      | Without Profits. |
|                     | <i>Rs.</i>    | <i>Rs.</i>       | <i>Rs.</i>         | <i>Rs.</i>       |
| 18                  | 38            | 35               | 41                 | 37               |
| 20                  | 39            | 35               | 42                 | 38               |
| 22                  | 40            | 36               | 43                 | 39               |
| 24                  | 41            | 37               | 44                 | 40               |
| 26                  | 42            | 38               | 45                 | 41               |
| 28                  | 43            | 39               | 46                 | 42               |
| 30                  | 44            | 41               | 47                 | 43               |
| 32                  | 46            | 42               | 48                 | 44               |
| 34                  | 47            | 43               | 50                 | 46               |
| 36                  | 49            | 45               | 52                 | 47               |
| 38                  | 50            | 46               | 53                 | 49               |
| 40                  | 52            | 48               | 55                 | 50               |
| 42                  | 55            | 50               | 57                 | 52               |
| 44                  | 57            | 52               | 60                 | 55               |
| 46                  | 60            | 55               | 62                 | 57               |
| 48                  | 63            | 57               | 65                 | 60               |
| 50                  | 66            | 61               | 69 <sup>n</sup>    | 63               |
| 52                  | 70            | 64               | 73                 | 67               |
| 54                  | 75            | 69               | 78                 | 71               |
| 56                  | 80            | 74               | 83                 | 76               |
| 58                  | 86            | 79               | 89                 | 82               |
| 60                  | 93            | 85               | 96                 | 88               |

Prospectuses shewing the great advantages of this Company to be had of the Agents.

DUNLOP & Co.

# SPECIAL NOTICE.

## SECOND DIVISION OF PROFITS.

The Directors of the Colonial Life Assurance Company beg to give notice that, in order to secure a right to participate to the extent of Five Years in the Profits to be declared in 1859, applications for Assurance must be lodged at one of the Agencies of the Company on or before 25th May 1855.

## The Colonial Life Assurance Company.

CAPITAL,—ONE MILLION STERLING.

### GOVERNOR,

The Right Hon the EARL of ELGIN and KINCARDINE.

Head-Office—EDINBURGH, 5 GEORGE STREET.

### BOMBAY.

#### BOARD OF DIRECTORS.

RICHARD WILLIS, Esq., Merchant, of Messrs. Forbes & Co.

HAMILTON BOSWELL GILMOUR, Esq., Merchant, of Messrs. Martin, Young & Co

WILLIAM SCOTT, Esq., Merchant, of Messrs. Peel, Cassels, & Co.

WILLIAM HANCOCK GREY, Esq., Merchant, of Messrs G.S King & Co.

Medical Adviser :—J. YUILL, Esq.

Agents :—CARDWELL, PARSONS, & Co.

### DIVISION OF PROFITS

The First Investigation and Division of Profits in this Company took place as at 25th May 1854, and the Addition to Policies was at the rate of £2 per cent. per annum of Reversionary Bonus, as shown in the following Table,—the examples being Policies of £1,000:

| Policy opened before | Original Sums Assured. | Bonus Additions. | Total Sums Assured. |
|----------------------|------------------------|------------------|---------------------|
| 25th May 1847,       | £1,000                 | £160             | £1,160              |
| " 1848,              | 1,000                  | 140              | 1,140               |
| " 1849,              | 1,000                  | 120              | 1,120               |
| " 1850,              | 1,000                  | 100              | 1,100               |
| " 1851,              | 1,000                  | 80               | 1,080               |
| " 1852,              | 1,000                  | 60               | 1,060               |
| " 1853.              | 1,000                  | 40               | 1,040               |
| " 1854,              | 1,000                  | 20               | 1,020               |

The additions to Policies of larger or smaller amount are in the same proportion. Future Investigations and Divisions of Profits will be made every five years. The next will take place at 25th May 1859. [Rates

## RATES OF PREMIUM.

Moderate rates of Extra Premium are charged for the East and West Indies, and other places abroad.

Persons Assured through the Indian Branch of the Company have permission to reside in any part of the world, so long as they continue to pay the original rate of Premium stipulated in their Policies.

Persons Assured for the Whole Term of Life returning to Europe or other climate considered equally healthy by the Directors, pay the reduced Premium applicable to Europe, according to the Company's published Rates (Table No. II) commencing with the first Annual Premium due after their arrival within such limits have been duly reported.

No Expenses in connexion with obtaining Policies; and all Medical Fees paid by the Company.

Premiums may be paid, and Claims settled, through the Agents of the Company in India and the Colonies.

From the extent and nature of the business transacted by this Company, the advantages afforded to Assurers, whether at home or abroad, cannot fail to be very great.

Agents in Calcutta, Madras, Shanghai, Penang, and Manilla, Ceylon, Cape of Good Hope, Mauritius, and in every Town of importance in British North America, and in the West Indies Correspondents in Australia.

By order of the Directors,

CARDWELL, PARSONS & CO.

Agents and Secretaries to the Local Board at Bombay.

## THE "BOMBAY GAZETTE."

This Journal is published early in the Morning every week day

### RATES OF SUBSCRIPTION.

|                                    |    |            |
|------------------------------------|----|------------|
| For a year in advance.....Rs       | 52 |            |
| Do Do. .... ,                      | 72 | Post free. |
| For half a year in advance..... ,  | 28 |            |
| Do Do. .... ,                      | 38 | Post free. |
| For three months in advance..... , | 16 |            |
| Do Do. .... ,                      | 21 | Post free  |
| For one month..... ,               | 6  |            |

## THE BOMBAY GAZETTE OVERLAND SUMMARY

Is published *twice a Month*—namely, on the departure of every Overland Mail for Europe. It consists of such Indian and other Eastern Intelligence as has transpired throughout the previous fortnight, and is known to be of general interest in Europe, including all important changes in the disposition of the Company's several Services, Reports of the Markets, Shipping, Register of Births, Deaths and Marriages, &c. &c..

*Annual Subscription, Rupees Ten, payable in advance.*

## MESSRS. TREACHER & Co.

*Have received by Ships "Lord Hardinge" and "Omar Pasha" and Overland.*

### JEWELLERY.

Standard Gold, Brilliant, Garnet, and Signet Rings.

Necklet. Garnet and Pearls.

|                              |  |                          |
|------------------------------|--|--------------------------|
| Do. Emeralds and Brilliants. |  | Gold and Silver Watches. |
| Brilliant Cross and Tye      |  | Do. Do. Thimbles.        |

### THERMOMETERS AND HYDROMETERS OF SORTS.

Mathematical Instruments.

Measuring Tapes (66 feet) in solid leather cases.

Pearl Do.

Gilt Letter Scales (English and Indian Weights.)

### BEAUTIFULLY COLOURED PRINTS.

Baxter's Gems of the Great Exhibition.

|                          |  |               |
|--------------------------|--|---------------|
| The day Before Marriage. |  | Birds' Nests. |
|--------------------------|--|---------------|

### OVERLAND TRUNKS.

Enamelled Leather Travelling Bags.

|                      |  |              |
|----------------------|--|--------------|
| Ladies Combinations. |  | Sponge Bags. |
|----------------------|--|--------------|

### LADIES' ROSEWOOD DRESSING CASES (SILVER MOUNTED.)

Gentlemen's Mahogany and Travelling Do.

Mahogany and other Dressing Glasses.

Ladies' Black Morocco Shoes.

Children's Do Boots and Shoes.

### GLOVES.

Ladies' and Gentlemen's White, Straw, Light, and Dark Coloured Gloves.

Ladies Gauntlets and Gentlemen's Buck and Doe Skin Gloves.

Tubular and other Neckties.

Silk and India Rubber Braces.

Elegant French Fans.

Hair, Tooth, Shaving, and Nail Brushes.

Clothes, Plate, Table and Billiard Table Do.

Tortoise-shell Dressing Combs.

Do. Side, Back, and Tail do.

Do. Pocket, and Ivory Small Tooth Do.

Do Whisker Combs.

Bostrukizon Curling Tongs (German Silver.)

### PERFUMERY.

By Lubin of Paris.

### STATIONERY.

Letter and Note Paper, suited to the new Postal Regulations.

Mourning do. do.

Blank Books of Sizes.

Table Watch Stands, in Paper Mache.

Drawing Pins.

Gold Pens.

## BRONZE STATUARY.

### SPECTACLES.

Convex and Concave, in Gold and Steel.

### EYE GLASSES.

In Gold and Tortoise Shell.

Pocket Magnifying Glasses in Mother O'Pearl and Tortoise Shell  
Eye Preservers, Wire and Glass.

### MAPPIN'S CUTLERY.

Sporting Knives.—Pen Knives.—Scissors in Cases (sets)

### WHIPS.

Gentlemen's Turkey Riding Whips (Gold and Silver mounted )

Ladies do. do

Ladies Twigs (Silver and Electro-plated.)

### POWDER FLASKS.

Hard Soldered Bronze, German Silver, with Patent Spring Tops  
Patent Double Shot Belts.

Do. Shot Pouches (Steel Springs )

Do. do. do. (German Silver, Lever.)

### HATS.

Ellwood's Patent Air Chamber Velvet Hats.

Do. Extra Fine Velvet do. on Cork.

Do. Patent Air (Drab) Felt Helmets.

Do. Drab felt Hats,

Cricket Bats, Balls, and Stumps, by Duke, Darke, and Clapshaw.

Staunton's Chess Boards and Men.

Ivory Billiard Balls.

| Spare Tips.

### FILTERS.

1/2—1 and 2 Gallons.—Syphon do.—Pocket do. do.

### TOBACCO.

Taddy's Superior Bird's Eye and Shag Tobacco.—Honey Dew (Cavendish.)

### MANILLA CHERROOTS.—No. 2 and 3.

Superior Meerschaum Pipes and Bowls, (Plain and Silver mounted.)  
Cutty Pipes, loose & in Cases &c. &c.

A large stock of Messrs Cutler & Co.'s Wines always on hand.

Superior Chemicals for Photographical purposes.

Photographic Likenesses, Views taken by Mr. T. Shepherd, Practical  
Chemist and Photographer, at Messrs Treacher and Co's Poona.

Bombay, 15th March, 1855.

A SELECT LIST  
OF  
NEW AND STANDARD WORKS  
RECENTLY PUBLISHED BY  
• SMITH ELDER AND Co. LONDON,  
AND  
• SMITH TAYLOR AND Co. BOMBAY.

**The Works of Mr. Ruskin. . . .**

I.

**THE STONES OF VENICE.**

*Now complete, in Three Volumes, Imperial 8vo. with 53 Plates and numerous Woodcuts, drawn by the Author.*

*Price Rs. 72, in embossed cloth, with top edge gilt.*

*Elegantly bound in morocco extra, Rs. 125.*

EACH VOLUME MAY BE HAD SEPARATELY IN CLOTH.

Vol. I. The FOUNDATIONS, *with 21 Plates, price Rs. 26-4*

Vol. II. The SEA STORIES, *with 20 Plates, price „ 26-4*

Vol. III. The FALL, *with 12 Plates, price „ 9-0*

“ This book is one which, perhaps, no other man could have written, and one for which the world ought to be, and will be, thankful. It is in the highest degree eloquent, acute, stimulating to thought, and fertile in suggestion. It shows a power of practical criticism which, when fixed on a definite object, nothing absurd or evil can withstand; and power of appreciation which has restored treasures of beauty to mankind. It will, we are convinced, elevate taste and intellect, raise the tone of moral feeling, kindle benevolence towards men, and increase the love and fear of God.”—*Times*.

II.

**MODERN PAINTERS.**

*Imp. 8vo. Vol. I. Fifth Edition, Rs. 11-4, cloth.*

*Vol. II. Third Edition, Rs. 6-12, cloth.*

“ Mr. Ruskin's work will send the painter more than ever to the study of nature; will train men who have always been delighted spectators of nature, to be also attentive observers. Ornamentics will learn to admire, and mere admirers will learn how to criticise; thus a public will be educated.”—*Blackwood's Magazine*.

\* \* \* THE THIRD VOLUME IN PREPARATION.



### III.

## THE SEVEN LAMPS OF ARCHITECTURE.

WITH FOURTEEN ETCHINGS BY THE AUTHOR.

*Imperial 8vo. Rs. 13-4.*

"By the 'Seven Lamps of Architecture,' we understand Mr Ruskin to mean the seven fundamental and cardinal laws, the observance of and obedience to which are indispensable to the architect, who would deserve the name. The politician, the moralist, the divine, will find in it ample store of instructive matter, as well as the artist."—*Examiner*.

### IV.

## LECTURES ON ARCHITECTURE AND PAINTING.

WITH FIFTEEN PLATES DRAWN BY THE AUTHOR.

*Crown 8vo., price Rs. 5-8.*

"Like all the Author's writings, these Lectures are full of originality, of earnest thought, of manly protest against conventionalism, and of sound, healthy morality. You may disagree with Ruskin, if you like, but it is impossible not to admire him. It is impossible for a thoughtful man to read his works without delight and gratitude. Everybody interested in art should get these Lectures."—*Daily News*.

### V.

## THE KING OF THE GOLDEN RIVER.

WITH 22 ILLUSTRATIONS BY RICHARD DOYLE.

*Price Rs. 1-12.*

"This little fairy tale is by a master hand. The story has a charming moral, and the writing is so excellent, that it would be hard to say which it will give the most pleasure to, the very wise man or the very simple child."—*Examiner*.

### VI.

EXAMPLES OF THE ARCHITECTURE OF VENICE, Selected and Drawn to Measurement from the Edifices, In Parts of Folio Imperial size, each containing Five Plates, and a short Explanatory Text. Price Rs. 16.—Parts One to Three are Published. Fifty India Proofs only are taken on Atlas Folio, price Rs. 32 each Part.

### VII.

THE OPENING OF THE CRYSTAL PALACE : Considered in some of its relations to the Prospects of Art. 8vo. Price 12 Annas.

"An earnest and eloquent appeal for the preservation of the ancient monuments of Gothic architecture."—*English Churchman*

### VIII.

PRE-RAPHAELITISM. 8vo. Rs. 1-8, Sewed

"We wish that this pamphlet might be largely read by our art-patrons, and studied by our art-critics. There is much to be collected from it which is very important to remember."—*Guardian*.

## IX.

### NOTES ON THE CONSTRUCTION OF SHEEPFOLDS.

8vo., 12 Annas.

"A pamphlet on the doctrine and discipline of the Church of Christ."—*Britannia*.

## Works of Mr. Thackeray.

### I.

THE ROSE AND THE RING; Or, the History of Prince Giglio and Prince Bulbo. By Mr. M. A. TITMARSH. With 58 Cuts drawn by the Author. Price Rs 3-12.

We have not met with so good a Fairy Tale since Mr Ruskin's, that was seriously, this is comically, poetical, with no lack of quiet satire. It is a most sensible piece of nonsense—a thoroughly light-hearted and lively Christmas book for boys and girls, old and young."—*Athenæum*

"A book of broad fun, with here and there sly strokes of satire. The wisdom that breathes from its pages is the wisdom that sounds in a hearty laugh."—*Spectator*.

### II.

LECTURES ON THE ENGLISH HUMOURISTS OF THE 18TH CENTURY. By W. M. THACKERAY, Esq., Author of "Esmond," "Vanity Fair," "The Newcomes," &c. &c. Second Edition, revised By the Author. In One Volume, crown 8vo, price Rs. 6-12.

"What fine things the lectures contain! What eloquent and subtle sayings, what wise and earnest writing! How delightful are their turns of humour, with what a touching effect, in the graver passages, the genuine feeling of the man comes out, and how vividly the thoughts are painted, as it were, in graphic and characteristic words."—*Examiner*.

### III.

ESMOND. By W. M. THACKERAY, Esq. Second Edition, 3 Vols., crown 8vo, price Rs. 19-8.

"Mr. Thackeray has selected for his hero a very noble type of the cavalier softening into the man of the eighteenth century, and for his heroine one of the sweetest women that ever breathed from canvas or from book, since Raffaele painted and Shakspeare wrote. The style is manly, clear, terse, and vigorous, reflecting every mood—pathetic, grave, or sarcastic—of the writer."—*Spectator*.

"In quiet richness, 'Esmond' much resembles the old writers, as it does also in weight of thought, sincerity of purpose, and poetry of the heart and brain."—*Fraser's Magazine*

### IV.

THE KICKLEBURYS ON THE RHINE. By Mr. M. A. TITMARSH. With 15 Cuts, Drawn by the Author. Price Rs. 3-4 plain, and Rs. 4-12 coloured.

A PORTRAIT OF W. M. THACKERAY, Esq. Engraved by Francis Holl, from a Drawing by Samuel Laurence. India Proofs, Rs. 32. Prints, Rs. 16.

## Works Just Published.

I.

*In one Volume, demy 8vo. Price Rs. 6.*

### HISTORY OF THE SUPPRESSION OF INFANTICIDE IN WESTERN INDIA.

UNDER THE DIRECTION OF THE GOVERNMENT OF BOMBAY.

*Including Notices of the Provinces and Tribes in which the practice  
has prevailed.*

By JOHN WILSON, D.D., F.R.S.

HONORARY PRESIDENT OF THE BOMBAY BRANCH OF THE ROYAL  
ASIATIC SOCIETY, AND MISSIONARY OF THE FREE CHURCH  
OF SCOTLAND.

II.

### MILITARY FORCES AND INSTITUTIONS OF GREAT BRITAIN. Their Constitution, Administration, and Government, Military and Civil. By H. BYERLEY THOMSON, Esq., Barrister- at-law, Author of "The Laws of War affecting Commerce and Shipping." 8vo. Price. Rs. 9-8.

III.

### FOUR YEARS AT THE COURT OF HENRY VIII. : Being a Selection of the Despatches of SEBASTIAN GIUSTINIAN, Venetian Ambassador, 1515-1519. Translated by RAWDON BROWN. Two Volumes, crown 8vo. Price Rs. 13-4.

"A work valuable alike to the Antiquary and the Historian. As full of anecdotes as a biography, and as amusing as a novel"—*Economist*

"Nowhere is there contained so minute a picture of the English court from 1515 to 1519, and so exact an account of the European intrigues and alliances of that time, as are comprised in this correspondence"—*Press*

"These volumes are delightful reading."—*Leader*.

IV.

### THE RUSSO-TURKISH CAMPAIGNS OF 1828-9 : With an account of the present state of the Eastern Question. By COL. CHESNEY, R.A., D.C.L., F.R.S. Third Edition. Post 8vo, with Maps. Price Rs. 7-8.

"Colonel Chesney supplies us with full information respecting this important period of European History, and with an accurate description, from a military point of view, of the countries which form, at present, the theatre of war."—*Examiner*.

Colonel Chesney's work is one of great interest, and is the best military account of these campaigns that we have."—*Daily News*

V.

THE LAWS OF WAR,

AFFECTING COMMERCE AND SHIPPING.

By H BYERLEY THOMSON, Esq., B.A., Barrister at Law.  
Second Edition, greatly enlarged. 8vo. Price Rs. 3, boards.

VI.

A MANUAL OF THE MERCANTILE LAW OF GREAT  
BRITAIN AND IRELAND, By LEONE LEVI, Esq., F.S.S.  
Author of "The Commercial Law of the World." 1 vol. 8vo. cloth,  
Rs. 7-8.

VII.

MEMORANDUMS MADE IN IRELAND. By SIR JOHN  
FORBES, M.D., Author of "The Physician's Holiday." Two vols.,  
Post 8vo. with Illustrations, price Rs. 13-4.

"A complete handbook of the sister island. If there be any, who, knowing nothing of its  
social and political condition, meditate a tour in Ireland, the pleasure and profit to be derived  
from the journey will be much enhanced by a careful study of Dr Forbes's very sensible observa-  
tions."—*New Quarterly Review*

VIII.

JUVENILE DELINQUENCY. Two Essays which obtained  
the Prizes offered by Lady Noel Byron. By MICHAEL HILL and  
C F. CORNWALLIS. One Volume, post 8vo, price Rs. 3-12.

"This volume is the best existing manual of the subject. The first Essay may be said to com-  
pass the whole round of the subject, with its statistics presenting a manual of the standing facts  
and arguments. The other is remarkable for a vigorous portraiture of the general causes of  
juvenile delinquency. and it has a novelty and force which throw a new light upon the subject."  
—*Spectator*.

IX.

A MANUAL OF PRACTICAL THERAPEUTICS ; Considered  
chiefly with reference to Articles of the Materia Medica. By ED-  
WARD JOHN WARING, M.R.C.S., H.E.I.C.S. One thick Volume,  
Foolscap 8vo (755 pp.) Price Rs. 7-12

"A very useful work, giving, as briefly as possible, the opinions of the standard English writers,  
on the Therapeutic employment of each article of the 'Materia Medica.'"—*Medico-Chirurgical  
Review*

X.

MODERN GERMAN MUSIC. By HENRY F. CHORLEY, Esq.  
Two Volumes, post 8vo. Price Rs. 13-4.

"Mr Chorley is a tourist with a purpose, he travels as a pilgrim to the shrines and dwelling  
places of the art which he loves, and on which he here expatiates. He takes with him a power  
of appreciating all that is noble in art and worthy in the artist; but his Hero is Mendelssohn,  
with whom he lived on terms of intimate knowledge."—*Athenaeum*.

XI.

**BALDER.** A POEM. By the Author of "The Roman." Second Edition, with Preface by the Author. One Volume, crown 8vo, price Rs. 4-12 cloth.

" 'Balder' is a tragic representation of genius without faith. The story of genius vanquished by misery where it sinned—in the little world of home"—*North British Review*

XII.

**SCHOOL EXPERIENCES OF A FAG AT A PUBLIC AND PRIVATE SCHOOL.** By GEO. MELLY. Post 8vo. Price Rs. 4-8.

"There is spirit, humour, and good feeling in the narrative."—*Standard*

"This Volume will be read with infinite relish—it is a capital description of School Life"—*Sunday Times*

## Works of Mr. Leigh Hunt.

I.

**THE AUTOBIOGRAPHY OF LEIGH HUNT** : with Reminiscences of Friends and Contemporaries, 3 vols. post 8vo, Rs. 9-8.

"These Volumes contain a personal recollection of the literature and politics, as well as some of the most remarkable literary men and politicians, of the last fifty years"—*Spectator*

II.

**MEN, WOMEN, AND BOOKS.** 3 vols. post 8vo, with Portrait, Rs. 7.

"A book for a parlour-window, for a summer's eve, for a warm fireside, for a half-hour's leisure, for a whole day's luxury, in any and every possible shape a charming companion"—*Westminster Review*.

III.

**IMAGINATION AND FANCY.** Cloth Rs. 3-4.

"The very essence of the sunniest qualities of the English poets"—*Atlas*.

IV.

**WIT AND HUMOUR.** Cloth, Rs. 3-4.

"A book at once exhilarating and suggestive."—*Athenæum*.

V.

**A JAR OF HONEY FROM MOUNT HYBLA.** Rs. 3-4.

VI.

**TABLE TALK.** Cloth, Rs. 3-4.

"Precisely the book we would take as a companion on the green lane walk."—*Globe*

## Miss Kavanagh's Works.

### I.

GRACE LEE. By JULIA KAVANAGH, Author of "Women of Christianity," "Nathalie," "Daisy Burns," &c. Three Volumes, post 8vo. Rs. 19-8.

### II.

WOMEN OF CHRISTIANITY, EXEMPLARY FOR PIETY AND CHARITY. By JULIA KAVANAGH. Post 8vo. with Portraits. Price Rs. 7-8, in embossed cloth, gilt edges.

"A more noble and dignified tribute to the virtues of her sex we can scarcely imagine than this work, to which the gifted authoress has brought talents of no ordinary range, and, more than all, a spirit of eminent piety"—*Church of England Quarterly Review*.

### III.

WOMAN IN FRANCE DURING THE 18TH CENTURY. By JULIA KAVANAGH. 2 vols. post 8vo., with Eight Portraits; in embossed cloth, Rs. 9.

"Mrs Kavanagh has undertaken a delicate task, and she has performed it on the whole with discretion and judgment. Her volumes may lie on any drawing-room table without scandal, and may be read by all but her youngest countrywomen without risk."—*Quarterly Review*.

## Works on Indian Subjects.

### I.

THE ENGLISH IN WESTERN INDIA; Being the Early History of the Factory at Surat, of Bombay, &c By PHILIP ANDERSON, A.M. 8vo, Rs. 4.

"Quaint, curious, and amusing, this volume describes, from old manuscripts and obscure books, the life of English merchants in an Indian factory. It contains fresh and amusing gossip, all bearing on events and characters of historical importance"—*Athenæum*.

"A book of permanent value."—*Guardian*

### II.

THE BHILSA TOPES; Or, Buddhist Monuments of Central India. By MAJOR CUNNINGHAM. One Volume, 8vo, Thirty-three Plates, price 18-12 as.

"Of the Topes opened in various parts of India, none have yielded so rich a harvest of important information as these of Bhilsa, opened by Major Cunningham and Lieut Maisey: and which are described, with an abundance of highly curious graphic illustrations, in this most interesting book."—*Examiner*.

"The work of Major Cunningham contains much that is original, and preserves the results of very important investigations. The variety of representations in bas-relief is unusually large. Not only are religious and military pageants, ceremonies, and battles depicted, but domestic scenes of a highly interesting character"—*Athenæum*.

### III.

**HISTORY OF INDIA UNDER THE TWO FIRST SOVEREIGNS OF THE HOUSE OF TAIMUR : BABER AND HUMAYUN** By WILLIAM ERSKINE, Esq. 2 vols. 8vo. cloth, Rs 20.

"The work abounds in original incidents and anecdotes illustrative of the character and manners of the conquerors and conquered. Mr Erskine's History is not a mere skilful compilation, like most other Oriental Histories written by European scholars on the contrary, this faithful and highly instructed Author derives his information from the fountain heads of Persian, Turkish, and Indian story, with as much erudition, care, and fidelity as Gibbon displayed in drawing his from the ancient and modern languages of Europe."—*Examiner*.

### IV.

**THE LAND TAX OF INDIA,** According to the Moolhummudan Law. By NEIL B. E. BAILLIE, Esq., Author of the "Moolhummudan Law of Sale," &c. 8vo. Price Rs. 3-12.

"Mr Baillie may be said to exhaust the subject of which he affords a complete elucidation, and the accuracy of his translation may be implicitly relied on."—*Press*

"A complete account of the Mahomedan law of land-tax."—*Economist*.

"A learned and valuable treatise."—*Literary Gazette*

### V.

**THE MOOHUMMUDAN LAW OF SALE,** According to the Huneefeen Code, selected and translated from the Original Arabic, with an Introduction and Explanatory Notes. By NEIL B. E. BAILLIE, Esq. Royal 8vo., cloth, Rs. 8-12.

### VI.

**THE MOOHUMMUDAN LAW OF INHERITANCE,** According to Aboo Huneefa and his followers. By NEIL B. E. BAILLIE, Esq. 8vo., cloth, Rs. 3-12

### VII.

**MAP OF THE ISLAND OF BOMBAY,**

Executed in Lithography from a Plan by MAJOR T. B. JERVIS, late of the Bombay Engineers.

*Mounted on Cloth, Price Rs. 1 — On Plate Paper, Rs. 2.  
On Plain Paper, 12 as.*

### VIII.

**VIEW OF THE ISLAND AND HARBOUR OF BOMBAY,** Beautifully executed in Lithography, from a Drawing by W. A. FALLON. Price, Rs. 10.

### IX.

**CRAWFURD'S GRAMMAR AND DICTIONARY OF THE MALAY LANGUAGE.** 2 vols 8vo. Rs. 22-8 cloth.

"A book of standard and enduring value the best authority now extant on the subject of which it treats."—*Examiner*

### X.

**THE THEORY AND PRACTICE OF CASTE.** By B. A. IRVING, Esq. One Volume, post 8vo, price Rs. 3-4, cloth.

XI.

**THE INSURRECTION IN CHINA.** By Dr. YVAN and M. CALLERY. With a Supplementary Account of the most Recent Events. By JOHN OXFORD. *Third Edition, Enlarged.* Post 8vo., with Chinese Map and Portrait, Rs. 4-12, cloth.

"A curious book, giving a lucid account of the origin and progress of the civil war now raging in China, bringing it down to the present day"—*Blackwood's Magazine*.

"The book can scarcely fail to find a curious and interested public"—*Athenæum*.

"An interesting publication, full of curious and valuable matter"—*Examiner*.

XII.

**THE CROSS AND THE DRAGON ; or, The Fortunes of Christianity in China ; with notices of the Secret Societies of the Chinese.** By J. KESSON. One Volume, post 8vo, price Rs. 8-12, cloth.

"A painstaking and conscientious book"—*Spectator*

"A very readable outline of the subject"—*Athenæum*

XIII.

**THOM ON STORMS IN THE INDIAN OCEAN.** 8vo.  
Rs. 7-8, cloth.

XIV.

**DR. ROYLE ON THE CULTURE AND COMMERCE OF COTTON IN INDIA** 8vo., cloth. Rs. 1/-4.

XV.

**THE FIBROUS PLANTS OF INDIA FITTED FOR CORDAGE, CLOTHING AND PAPER.** By DR J FORBES ROYLE. 8vo.  
(Nearly Ready.)

XVI.

**PHYSICAL GEOGRAPHY OF THE HIMALAYA.** By CAPT. RICHARD STRACHEY, Bengal Engineers. One Volume, 8vo, with numerous Illustrations.  
(Nearly ready)

XVII.

**TRAVELS AND ADVENTURES IN ASSAM.** By CAPT. JOHN BUTLER. One Volume, 8vo., with Plates.

XVIII.

**THE SECOND BURMESE WAR. A NARRATIVE OF THE OPERATIONS AT RANGOON.** By Lieut. WILLIAM F. B. LAURIE, Madras Artillery. Post 8vo, with Map, Plans, and Views. Price Rs. 6-12, cloth.

"A rapid narrative, in soldierly style, of the warlike operations at Rangoon"—*Athenæum*

XIX.

**PEGU : A Narrative of the Concluding Operations of the Second Burmese War, being a Relation of the Events from August 1852, to the Conclusion of the War.** By LIEUT. W. B. LAURIE, Madras Artillery. One thick Volume, post 8vo, with numerous Plans and Views. Price Rs. 8-12, cloth.



## Works on Photography.

|   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|----|
| HUNT'S MANUAL OF PHOTOGRAPHY, 4th edition, revised, post 8vo.   | - | - | - | - | - | 3 | 12 |
| THORNTHWAITE'S GUIDE TO PHOTOGRAPHY, 8th edn. <i>including the recent improvements in the</i> CALOTYPE, <i>daguerreotype</i> , COLLODION, ALBUMEN, AND MIXED PAPER PROCESSES, <i>with the Method of taking</i> STEREO-SCOPIC PICTURES | - | - | - | - | - | 1 | 12 |
| BINGHAM'S PHOTOGENIC MANIPULATION, 2 Parts, complete, 18mo, cloth   | - | - | - | - | - | 1 | 12 |
| DELAMOTTE'S PRACTICE OF LITHOGRAPHY, new Edn.   |   |   |   |   |   | 3 | 0  |
| COLLINS' HANDBOOK OF PHOTOGRAPHY, fcap sewed.   |   |   |   |   |   | 1 | 4  |
| HEISCH'S PLAIN DIRECTIONS for obtaining Photographic Pictures upon Waxed and Albumenised Paper and Glass, &c.   |   |   |   |   |   | 1 | 8  |
| HENNAH ON THE COLLODION PROCESS   | - | - | - | - | - | 0 | 12 |
| LE GRAY on the Waxed Paper Process  | - | - | - | - | - | 0 | 12 |
| LONG'S PRACTICAL PHOTOGRAPHY—on Glass and Paper   |   |   |   |   |   | 0 | 12 |

## Stereoscopes and Stereoscopic Pictures.

|   |   |   |   |   |   |          |   |
|---|---|---|---|---|---|----------|---|
| BREWSTER'S IMPROVED LENTICULAR OR REFRACTING STEREOSCOPE for the exhibition of Portraits, Architectural subjects, still Life, groups of Statuary, &c. &c. In Mahogany and Rosewood with mounted Eye-pieces, Rs. 18 & Rs. 20 |   |   |   |   |   |          |   |
| DAGUERREOTYPE PICTURES FOR THE STEREO-SCOPE,  | - | - | - | - | - | from Rs. | 9 |
| CALOTYPE VIEWS ON PAPER FOR DO.   | - | - | - | - | - | "        | 3 |
| TRANSPARENT ALBUMEN PICTURES ON GLASS   | - | - | - | - | - | "        | 8 |

## CONTENTS OF No. II.

|   | PAGE |
|---|------|
| I RUSKIN ON THE PRINCIPLES OF ART.....  | 223  |
| 1. Modern Painters. Vol. I containing Parts 1 and 2 of General Principles, and of Truth By John Ruskin. 5th Edition. London. Smith Elder & Co 1851.   |      |
| Ditto, ditto, Vol. II. containing Part 3, Sections 1 and 2, Of the Imaginative and Theoretic Faculties. By John Ruskin. 3rd Edition. London: Smith Elder & Co. 1851.  |      |
| 2 The Stones of Venice. By John Ruskin. 3 Vols. Imperial 8vo. London. Smith Elder & Co. 1851-1853.  |      |
| 3 The Seven Lamps of Architecture. By John Ruskin. London: Smith Elder & Co. 1849.  |      |
| 4. Pre-Raphaelitism, by the Author of "Modern Painters." London: Smith Elder & Co. 1851.  |      |
| II THE MORALS OF THE INDIAN ARMY.....   | 247  |
| 1 Oakfield, or Fellowship in the East. By Punjabee. 2 Vols. London: Longman & Co. 1853.   |      |
| 2. Records of the Indian Command of General Sir Charles James Napier, G C B., comprising all his General Orders, Remarks on Courts Martial, &c. &c. Compiled by John Mawson. Calcutta. R. C. Lepage and Co. 1851.   |      |
| III. RAILWAYS IN WESTERN INDIA.....   | 281  |
| Minute by the Most Noble the Governor General, dated the 20th April 1853, on Railways in India, printed by order of the House of Commons, 19th July 1853.   |      |
| IV. NEWTON AND HIS PREDECESSORS .....   | 323  |
| The History of Physical Astronomy, from the earliest ages to the middle of the 19th Century, comprehending a detailed account of the Establishment of the Theory of Gravitation by Newton, and its Developement by his Successors; with an exposition of the progress of Research on all other subjects of Celestial Physics. By Robert Grant, F.R.A.S.—8vo. London: Baldwin, 1852. |      |
| V RAJPUT INFANTICIDE.....   | 341  |
| History of the Suppression of Infanticide in Western India under the Direction of the Government of Bombay,   |      |

including notices of the Provinces and Tribes in which the Practice has prevailed. By John Wilson, D.D., F.R.S., Honorary President of the Bombay Branch of the Royal Asiatic Society, and Missionary of the Free Church of Scotland, &c. Bombay & Smith, Taylor and Co. London : Smith Elder and Co. 1855.

VI. OXFORD..... 372

The Oxford University Calendar. 1855. •



THE

# BOMBAY QUARTERLY REVIEW.

APRIL, 1855.

## ART. I.—RUSKIN ON THE PRINCIPLES OF ART.

1. *Modern Painters*, 1st and 2nd Volumes.
2. *The Seven Lamps of Architecture*.
3. *The Stones of Venice*, 3 Vols.
4. *Pre-Raphaelitism*.\*

IN 1843 appeared a work intituled "Modern Painters," which attracted very general attention, and an unusually large force of hostile criticism. That work is the present first volume under that title.

There are cases in which the violence and the number of hostile critics are witnesses for no small force of truth in the subject of their attacks. Society does not become violently excited every time that any one writes a foolish book; and the society of artists and art-critics is moved by the same general influences as the rest of the world. It was, at once, virtually acknowledged by all, that this one volume, written by a then comparatively obscure individual, could not be despised, that it contained a living force, which would grow if not destroyed in the germ. There were some, who, at once, recognized the general truth of Mr. Ruskin's views; there were many, who, more hesitative, thought it not less likely that the principles of the work should be true, because at first they were everywhere spoken against. But, of course, the opponents were the most unhesitating, the most conspicuous, and the loudest.

The work originated, its author tells us, in indignation at the shallow and false criticism of the periodicals of the day, on the works of Turner. It grew into an Essay on Landscape Painting, having

\* Since the greater part of this article was written we have received Mr. Ruskin's Lectures on Architecture and Painting.

an especial purpose of opening the eyes of this generation to the fact, that in Turner it had, as he believed, the greatest Landscape Painter that the world has seen, and that it knew him not to be such because it was blinded by a superstitious reverence for the older masters, amongst whom, the professed Landscape Painters, as he believes, were neither great nor good, and was misled, by the scoffing of ignorant critics at truths which they could not apprehend. His purpose was also to illustrate the superiority, in certain important respects, of the modern school of Landscape Painters over that of the 17th century, which has been consecrated as affording the highest known, and almost the highest conceivable, development of the art. On this point he says :—

“ It is my purpose, therefore, believing that there are certain points of superiority in modern artists, and especially in one or two of their number, which have not yet been fully understood, except by those who are scarcely in a position admitting the declaration of their conviction, to institute a close comparison between the great works of ancient and modern landscape art, to raise, as far as possible, the deceptive veil of imaginary light through which we are accustomed to gaze upon the patriarchal work, and to show the real relations, whether favourable or otherwise, subsisting between it and our own. I am fully aware that this is not to be done lightly or rashly ; that it is the part of every one undertaking such a task, strictly to examine, with prolonged doubt and severe trial, every opinion in any way contrary to the severe verdict of time, and to advance nothing which does not, at least, in his own conviction, rest on surer ground than mere feeling or taste. I have accordingly advanced nothing in the following pages but with accompanying demonstration, which may indeed be true or false, complete or conditional, but which can only be met on its own grounds, and can in no way be borne down or affected by mere authority of great names. Yet even then I should scarcely have ventured to speak so decidedly as I have, but for my full conviction that we ought not to class the historical painters of the fifteenth, and landscape painters of the seventeenth centuries, together, under the general title of ‘ Old Masters,’ as if they possessed any thing like corresponding rank in their respective walks of art. I feel assured that the principles on which they worked are totally opposed, and that the landscape painters have been honoured only because they exhibited, in mechanical and technical qualities, some semblance of the manner of the nobler historical painters, whose principles of conception and composition they entirely reversed. The course of study which has led me feverently to the feet of Michael Angelo and Da Vinci, has alienated me gradually from Claude and Gaspar. I cannot, at the same time, do homage to power and pettiness—to the truth of consummate science, and the mannerism of undisciplined imagination. And let it be understood that whenever I speak depreciatingly of the old masters as a body, I refer to none of the historical painters, for whom I entertain a veneration, which, though, I hope, reasonable in its grounds, is almost superstitious in degree. Neither, unless he be particularly mentioned, do I intend to include Nicholas Poussin, whose landscapes have a separate and elevated character, which renders it necessary to consider them apart from all others. Speaking generally of the elder masters, I refer only to Claude, Gaspar Poussin, Salvator Rosa, Cuyp, Berghem, Both, Ruysdael, Hobbima, Teniers (in his landscapes), P. Potter, Canaletti, and the various Van Somethings, and

Back Somethings, more especially and malignantly those who have libelled the sea."\*

Treating the purposes of pictorial art as twofold—1st 'to induce in the spectator's mind the faithful conception of any natural objects whatsoever,' 2ndly, the 'expression and awakening of individual thought'—and pointing out that although the second is the highest aim, it can only be attained by means of the first, Mr. Ruskin undertakes, in the first instance, in this volume, to investigate 'the claims of the schools of ancient and modern landscape to faithfulness in representing nature.'

We have not time or space to indicate, much less to discuss, the accurate and comprehensive investigation by which Mr. Ruskin illustrates his views. We must be content to assure our readers, that the mere statement of the purpose of the work can give no adequate conception of its interest. His comprehensive views render the subject most interesting to any thoughtful mind; and we do not believe that an unprejudiced study of the work can fail to strengthen the moral feelings, and largely to develop the internal sources of delight from Landscape art. We will however quote the following extract, because it expresses, in great measure, his idea of the main difference between the 17th century and modern schools.

"M. de Marmontel, going into a connoisseur's gallery, pretends to mistake a fine Berghem for a window. This, he says, was affirmed by its possessor to be the greatest praise the picture had ever received. Such is indeed the notion of art which is at the bottom of the veneration usually felt for the old landscape painters; it is of course the palpable, first idea of ignorance; it is the only notion which people unacquainted with art can, by any possibility, have of its ends; the only test by which people, unacquainted with nature, can pretend to form anything like a judgement of art. It is strange, that, with the great historical painters of Italy before them, who had broken so boldly and indignantly from the trammels of this notion, and shaken the very dust of it from their feet, the succeeding landscape painters should have wasted their lives in jugglery; but so it is, and so it will be felt, the more we look into their works, that the deception of the senses was the great and first end of all their art. To attain this, they paid deep and serious attention to effects of light and tone, and to the exact degree of relief which material objects take against light and atmosphere; and sacrificing every other truth to these, not necessarily, but because they required no others for deception, they succeeded in rendering these particular facts with a fidelity and force which, in the pictures, which have come down to us uninjured, are as yet unequalled, and never can be surpassed. They painted their foregrounds with laborious industry, covering them with details so as to render them deceptive to the ordinary eye, regardless of beauty or truth in the details themselves; they painted their trees with careful attention to their pitch of shade against the sky, utterly regardless of all that is beautiful or essential in the anatomy of their foliage and boughs; they painted their distances with exquisite use of transparent colors and aerial tone, totally neglectful of all facts and forms which na-

ture uses such colors and tone to relieve and adorn. They had neither love of nature, nor feeling of her beauty; they looked for her coldest and most common place effects, because they were easiest to imitate; and for her most vulgar forms, because they were most easily to be recognised by the untaught eyes of those whom alone they could hope to please; they did it, like the Pharisees of old, to be seen of men, and they had their reward. They do deceive and delight the unpractised eye;—they will to all ages, as long as their colours endure, be the standard of excellence with all, who, ignorant of nature, claim to be thought learned in art. And they will to all ages be, to those who have thorough love and knowledge of the creation which they libel, instructive proof of the limited number and low character of the truths which are necessary, and the accumulated multitude of pure, broad, bold falsehoods which are admissible in pictures meant only to deceive.

\* \* \* \* \*

"Modern landscape painters have looked at nature with totally different eyes; seeking not what is easiest to imitate, but for what is most important to tell. Rejecting at once all idea of *bonâ fide* imitation, they think only of conveying their impression of nature into the mind of the spectator. And there is, in consequence, a greater sum of valuable, essential, and impressive truths in the works of two or three of our leading modern landscape painters, than in those of all the old masters put together, and of truth too, nearly unmixed with definite or avoidable falsehood; while the unimportant and feeble truths of the old masters are choked with a mass of perpetual defiance of the most authoritative laws of nature."\*

Soon after appeared a second distinct work, although it appeared under the title of the second volume of "*Modern Painters*." But for the connection with art generally, and so with the subject of the first volume, the title is inappropriate, and calculated to mislead, and it can give no idea of the import of the work. In the preface to the second Edition, after alluding to the first volume as "an endeavour to investigate and arrange the facts of nature with scientific accuracy," Mr. Ruskin describes the purpose of the second volume as being "to analyze and demonstrate the nature of the emotions of the Beautiful and the Sublime; to examine the particulars of every kind of scenery, and to bring to light, as far as may be in my power, that faultless, ceaseless, inconceivable, inexhaustible loveliness which God has stamped upon all things, if man will only receive them as he gives them." The foregoing sufficiently illustrates the purpose of the second volume; and that purpose is sought by a train of argument which leaves one at a loss, whether the logical and philosophical precision of the argument, the intuitive perception of principles, or the extraordinary command of language, be the more admirable. As we said above of the first volume, that it is calculated largely to develop the sources of delight in landscape art, much more confidently do we assert the power of this volume largely to develop our delight in nature. We regard the second volume of "*Modern Painters*" as Mr. Ruskin's greatest work. His other

works we should feel competent, principally by the light of his own teaching, to criticise in detail, if such criticism were our purpose ; but, this volume we should probably be obliged to confess to be above our criticism.

Although we attribute such excellence to the second volume of "*Modern Painters*," we do not suppose it to be the portion of Mr. Ruskin's writings which will be most interesting to the largest number of persons. There are many reasons, which our subsequent remarks will indicate or suggest, for supposing that his works on Architecture will have the widest interest.

"*The Seven Lamps of Architecture*" is a treatise on the great principles which must be the life of all noble architecture, thereby to illustrate "the moral function and end of art," and "to prove the share which it ought to have in the thoughts, and influence on the lives, of all of us." The words we have thus quoted were applied by the author to the purpose of the third volume of "*Modern Painters*" which has not yet appeared ; but we can find no fitter to indicate the purpose of the "*Seven Lamps of Architecture*."

"*The Stones of Venice*" has the same common purpose ; but that purpose, and the special reform which Mr. Ruskin desires to effect, are more completely developed. We therefore select this work for fuller notice, and shall endeavour to illustrate, more particularly, the general purpose and interest of Mr. Ruskin's writings therefrom.

The two principal purposes of this work, are, 1st, to establish some true canons, by which good architecture of any time, and in any style, may be distinguished from bad ; and, 2ndly, to expose the degradation of all art, and, especially, of architecture, which he believes to have resulted from the so-called re-naissance of classical art in the fifteenth century.

Venice is selected as being the architectural centre of the world, in which the Roman, Arab, and Lombard, or, in other words, the Classic, Byzantine, and Gothic Architecture met ; and also, because he believes, that in Venice and the cities of North Italy, Gothic Architecture attained its most perfect development, and in them also, the Renaissance Architecture was exhibited in its greatest originality and splendour. We do not mean, by the foregoing statement, to imply that Ruskin considers that the pre-renaissance Architecture of North Italy expressed most fully the peculiar Gothic spirit, but that, of all Architecture which may be included under the division of Gothic, this was of the highest excellence.

In making the foregoing statement we raise the very question, to answer which is one of the principal purposes of the work :—By what canons do we pronounce Architecture to be positively or relatively good or bad, of a higher or of a lower character ; what degree of



reality is it possible that there be, in the assertion of comparative intrinsic worth? We suppose it will scarcely be disputed, that Architecture, like everything else, must be positively good or bad, in proportion as it fulfils or disappoints its purpose, and must be relatively good, that is, of a higher or lower character, in just relation to the dignity of that purpose. However much we may overlook in reality even that simple fundamental consideration, few will dispute it when stated. The principal difference of opinion will be in respect of what are the several purposes of Architecture, what their relative importance to Architecture, and what their intrinsic dignity. In the first place it is necessary to remember, that it is not without reason that the word 'common' is used to signify inferiority, and that it is no peculiarity of Architecture that its least noble purpose is forced so immediately and prominently upon us, that we well nigh forget that it has any other. It is no peculiarity of Architecture that its highest function is often not by common eye discernible, and that, when manifested, it be an offence.

Of the most common purpose of Architecture there is no need to speak, save to note, that that purpose could be attained without introducing one single element of "art" into the work. The distinctive quality of architecture, which constitutes it an art, is the superaddition of something merely for delight, i. e. ornamental construction, not superseding, but transcending what the most common use of the building demands. This seems hardly disputable; and the inference can scarcely be avoided, that, presupposing an equal fitness for that inferior but immediate purpose which can be attained by judicious manufacture, one building or one style of Architecture is better than another, in so far as it gives more, or a higher kind of delight. We believe that the error of a large number of those who think about Architecture at all, consists in the hasty assumption that the kind of delight (excepting the effect of association, especially in relation to the uses of a building as in the case of churches) does not differ essentially between one Architecture and another; but only differs in respect of a few specific qualities of its cause, each of which qualities is a true source of delight, but commands a different amount of sympathy from different men, and the relative worth of which cannot satisfactorily be defined. This, though erroneous, is not wholly unfounded. As sources of delight, symmetry, proportion, color, grace of form, or the expression of power, are not altogether incapable of classification in respect of relative worth; but not so that if one building delight one man by its proportions, and another, another man by its color, and a third by certain ornamental forms, we can, without further enquiry, classify the relative dignity of the delight, or of the Architecture which imparted it. This can only be determined by

ascertaining the nature and rank of the faculties of mind which are severally addressed.

Architectural sources of delight may be classed as fourfold :

1st. The expression of Power ; by means, principally, of size, quantity, and variety ; causing a corresponding sense of power or force.

2nd. The expression of Beauty ; by means of structural and ornamental forms, and color ; causing a sense of love.

3rd. The expression of Sublimity ; by means, principally, of general structural form, size, contrasts of light and shade, and by other means, which would require a long treatise for explanation ; causing a sense of elevation of mind.

4th. The expression of definite Poetic thought and feeling ; by means, principally, of sculpture ; causing corresponding poetic feeling.

Of these, the first, the expression of mere Power, in the sense of force or effort, addresses itself, we believe, to less elevated faculties of mind, than do the others. The sense of this Power is probably the predominant impression received from great Architectural works, by uncultivated minds. The second and third address themselves to higher powers of mind, and, of course, in widely different degrees, according to the development of the moral and æsthetic faculties of the architect. The fourth, it appears to us, must, in its highest development, address itself to the highest faculties of all. Whatever may be the difficulty of determining the relative value of two architectural works, the decision must depend upon the degree and proportion in which each combines those several sources of delight.

That Architecture is one of the arts, no one will deny in theory, although it is constantly contradicted in practice, and by indirect teaching—that, as an art, it is something different from, and higher than, engineering science—that the essential quality is the superaddition of qualities merely for delight—this, we believe, is admitted by most who think about architecture at all ; but, that in its highest development, it is the expression of thought, just as truly, though not so evidently and directly, as is Poetry ; and that the comparative worth of two schools of architecture is no more a matter of mere opinion, and no more incapable of demonstration, than the comparative worth of two minds, which in many cases is as easy as in others it is difficult ; to this, three centuries of entire slavery to the five orders have blinded us.

Under the foregoing conception of the subject, we believe that Mr. Ruskin's views of the absolute superiority of Gothic over Renaissance classic architecture, is capable of what has received from him, complete demonstration.

The question of the superiority of Gothic architecture is evidently

a different one from that of the positively civil characteristics, which Mr. Ruskin attributes to the renaissance art.

It is sufficiently evident, that in the two questions, of relative worth of the several purposes of architecture, and of relative perfection in fulfilment of those purposes, are included numerous other questions more technical in proportion as they are more abundant, which must be considered, in establishing any true canons of architectural criticism. Of these, the first volume of the "*Stones of Venice*" treats, but in a manner free from all unnecessary technicality, Ruskin's special purpose being to make architecture perfectly intelligible to any educated man. He says, "I have utterly failed of my purpose if I have not made all the essential parts of the essay intelligible to the least learned, and easy to the most desultory readers, who are likely to take interest in the matter at all."

The need of such an elementary exposition of the true principles of architecture cannot well be disputed. Whatever may be thought of the beauty or appropriateness of modern classical architecture, its received canons scarcely pretend to be founded upon any æsthetic principle, solely upon tradition and precedent. The traditional teaching regarding classic art is gross empiricism and bigoted dogmatism, such as, let the intrinsic value of the subject matter be what it will, must be fatal to faith and liberty.

Architecture, as ordinarily taught on the basis of the five orders, is little short of what may be best expressed by a not classical but good Gothic term, Humbug. And in relation to Gothic architecture, Pugin's essay on the true principles of pointed architecture did most valuable service, but it was meagre, exclusive, and inaccurate; and a comprehensive and accurate development, such as the "*Stones of Venice*" purports to be, of the degree of essential truth which Pugin himself had apprehended, and the perception of which his essay awoke in so many minds, was peculiarly needed to prevent the extravagance or bigotry to which the conceit of partial truth must tend.

The other and most principal purpose of the "*Stones of Venice*," is, as we said above, to illustrate the degradation of art generally and specially of architecture, which he believes to have resulted from the renaissance of classic art in the fifteenth century.

To understand such brief explanations, as we must offer, of Ruskin's views, and their significance, it is necessary to bear in mind a few main facts and propositions.

Ruskin asserts that "the root of all that is greatest in Christian art was struck in the fifteenth century;" that Gothic architecture attained the highest perfection hitherto manifested, about the close of that century; that, at the end of the fourteenth century, the cor-

ruption, consequent on the false principles developed in the course of that century, began to be apparent ; that, in the earlier part of the fifteenth century, the decay was rapid ; and that, the passion for classical forms, of all kinds, which was the consequence of the extraordinary intellectual development of the latter part of the fifteenth century finding its principal food in Greek and Roman History and Philosophy, led to a gradual degradation of all art, and to an immediate and complete degradation of architecture.

Whatever be the opinion of the relative artistic qualities of Classic and Gothic art, the foregoing will, probably, be accepted as simple fact in respect of Gothic architecture, viz. that its most perfect development was at the end of the thirteenth century ; that it began to be debased at the end of the fourteenth, and that the renaissance of Greek and Roman forms did extinguish and supersede it. It will also we presume be accepted, as a simple fact, that, whether by moral necessity or not, the renaissance architecture did lead, by traceable degradation, to eighteenth century architecture, which, whether any will maintain to be great or good, we know not ; that, in this century, during the last thirty years' peace, there has been a reaction, accompanied by a widely spread conviction, that the force of foolishness and falsehood could, in architecture, no farther go ; that the old surviving Gothic buildings, principally, as it happened, ecclesiastical, reasserted their truth and power over the hearts of men.

So much may be accepted as mere fact. What Mr. Ruskin demonstrates is, that the spirit of the age of the renaissance was morally antagonistic to art, although that spirit was perforce subservient to the genius of that extraordinary generation, which saw the close of the fifteenth and the earlier portion of the sixteenth century—a generation, which witnessed the deeds of Columbus and Cortez, which gave birth to Luther and Ignatius Loyola, which saw Leo the Tenth, Charles the Fifth, Francis the First, Ferdinand and Isabella, and Henry the Seventh upon the thrones of Europe, and which produced an unparalleled brotherhood of Painters. Nevertheless, Mr. Ruskin shews, that pride of science, and pride of system, were the characteristics of the classic spirit, and that, as such, it was antagonistic to all art, but especially to Architecture, for reasons which we shall presently notice.

The peculiar term "classic" is a perpetual to the excessive love of system, which formed so important an element in the spirit of the renaissance period. It is very remarkable, by common consent, the term "classic," i. e., systematic, should have been applied, in every conceivable manner, to the peculiar studies of that age. Mr. Ruskin's conviction is, that, on the whole, the characteristics of the pre-renaissance and post-renaissance schools of art were, that the for-

mer were schools of thought, and the latter of science; and, as thought is both more valuable and more essential to art than mere knowledge, so the pre-renaissance schools are more valuable than the modern.

Mr. Ruskin fully admits the wonderful power of the early renaissance artists. This power did great things in painting and sculpture, but failed in architecture; and the reason of this is indicated in the following passage:—

"For the first time since the destruction of Rome, the world had seen in the work of the greatest artists of the fifteenth century, in the painting of Ghirlandajo, Masaccio, Francia, Perugino, Pinturicchio, and Bellini; in the sculpture of Mino da Fiesole, of Ghiberti and Verrocchio, a perfection of execution and fullness of knowledge which cast all previous art into the shade, and which, being in the work of those men united with all that was great in that of former days, did indeed justify the utmost enthusiasm with which their efforts were, or could be, regarded. But when this perfection had once been exhibited in anything, it was required in every thing: the world could no longer be satisfied with less exquisite execution, or less disciplined knowledge. The first thing that it demanded in all work was, that it should be done in a consummate and learned way; and men altogether forgot that it was possible to consummate what was contemptible, and to know what was useless. Imperatively requiring dexterity of touch, they gradually forgot to look for tenderness of feeling; imperatively requiring accuracy of knowledge, they gradually forgot to ask for originality of thought. The thought and the feeling which they despised departed from them, and they were left to solicitate themselves on their small science and their neat fingering. This is the history of the first attack of the Renaissance upon the Gothic Schools, and of its rapid results; more fatal and immediate in architecture than in any other art, because there the demand for perfection was less reasonable, and less consistent with the capabilities of the workman; being utterly opposed to that rudeness or savageness on which, as we said above, the nobility of the elder schools in great part depends. But, inasmuch as the innovations were founded on some of the most beautiful examples of art, and headed by some of the greatest men that the world ever saw, and as the Gothic with which they interfered was, and maintained, the first appearance of the Renaissance feeling had the force of a healthy movement. A new energy replaced whatever weariness or decline had affected the Gothic mind; an exquisite taste and refinement, added by extended knowledge, furnished the first models of the new School; and over this whole of Italy a style arose, generally now known as cinque-cento; which in sculpture and painting, as I just stated, produced the noblest masters whom the world ever saw, headed by Michael Angelo, Raphael, and Leonardo; but which failed of doing the same in Architecture, because, as we have seen above, perfection is therein not possible, and failed more really when it would otherwise have succeeded, because the classical enthusiasm had destroyed the best type of architectural form."

"For observe, in a demand for uniformity, the Renaissance principle, as it consisted in a demand for uniformity, is quite distinct from the Renaissance principle as it consists in a demand for classical and Roman forms of perfection." \* &c. &c.

y, the Renaissance principle, as it consisted in a demand for uniformity, is quite distinct from the Renaissance principle as it consists in a demand for classical and Roman forms of perfection."

Moreover, the works of Greek and Roman Painters had not survived like the classic architecture; and, consequently, the exclusive admiration of classic forms had a comparatively indirect effect on painting. But the peculiar spirit of system resulted in modern in a slavish subjection to empirical rules founded on the works of great masters, in the substitution of their works as infallible instead of God's truth as exhibited in His works. We do not use the words 'infallible guides.' Sir Joshua Reynolds says, "I would chiefly recommend that an implicit obedience to the rules of art," (rules, be it observed, not principles) "as established by the practice of the great masters, should be exacted from the young students; that those models which have passed through the approbation of ages should be considered by them as *perfect and infallible guides*." This is either degrading art, or talking nonsense. If art have anything of divine in it, if it be the expression of thought at all, the works of imperfect and fallible men can never afford a perfect and infallible guide. The false conception of the nature and purpose of art combined with the love of system, led to a demand for some human standard of excellence in every branch. Amongst Historic Painters, the modern schools have consecrated the true heroes, but the professed landscapists of the renaissance belong to a later and inferior generation of artists in the seventeenth century, and our moderns have in great measure placed the works of these men between themselves and nature ever since. Thus the very pride, which led to the demand for universal perfection, resulted in an idolatry of imperfection, which will appear as strange as all other idolatries to those who are once freed from the delusion. The worship of the great Historic Painters has been probably a nearly equally ignorant worship on the part of the multitude. Although accidentally directed to more worthy objects, still it is an idolatry, resulting in the dead formalisms to which all idolatries tend.

Mr. Ruskin further shews, or rather reminds us, that from the excessive development of classic formalities did ensue infection of formalism, having tortured the very trees of our gardens into geometrical shapes, had reached its height, and the disease, of all sense of natural beauty, or a reaction, was inevitable. The reaction which was literally, Syntax in search of the picturesque, occurred, and necessarily first manifested itself as respects art in landscape painting; hence the liberty and its worthy fruits in the works of the most eminent modern landscape painters; but the reaction being merely instinctive, and unconscious of its own import, could not prevail over the traditional teaching of the schools. The returning admiration of Gothic architecture was another manifestation of the same reaction.

It was in architecture that the errors of the classic spirit found their fullest expression. The Gothic forms had lost their truth and spirit, and the superstitious and exclusive admiration of classic forms had full sway. And here we may appropriately notice an objection, which we have heard offered, that Ruskin confines art to Sculpture, Painting, and Architecture; but that Poetry and Music are arts too, and how would his views of the renaissance influence on art apply to them? In the first place it is necessary to define what there is common to all the arts, which is implied by the term 'art' as including all. All art is the expression of thought; what distinctive peculiarity, in the mode of expressing thought, have the arts in common? Simply, the expression of thought by language, whether of form, sound, or speech, transcending the language of ordinary life. This is evidently the simplest definition of poetry—the expression of thought by language beautified by ornaments of construction transcending those used in ordinary speech. Perfectly consistent with this definition is the wider sense in which we use the term 'poetry.' Every one would feel the propriety of terming music the poetry of sound, and sculpture and painting the poetry of form and colour. But by what laws do we reach to nobler language? In passing from the ordinary and familiar speech, by what guides do we recognize a higher and a lower? Doubtless, our delight, both in form and sound, is equally, although less evidently in the latter than in the former, determined by our experience of God's works, i. e. the forms and sounds of nature; and in poetry proper, given the noble thought which is an essential of all art, whence do we derive the harmonies and melodies of verse? Surely, though more remotely, they are no less truly derived from the harmonies and melodies in the world around us. Thus what Ruskin asserts of noble ornamentation, that it is the expression of man's delight in God's works, will be found applicable to all art.

If all art be the expression of thought by noble language, whether of form, sound, colour, or speech, it is to be expected that that art which most fully and directly answers the common purpose of expression of thought should have the least formal character, and conversely, and that, consequently, the classic spirit, in its pride of learning, and love of system, should have influence upon each art in just proportion to its capability of being made subservient to the exhibition of science and system. Such appears to have been the case. Poetry proper, although expressing fully the prevailing taste, escaped, in great measure, from the empirical dogmatism of the classical fashion. Not so the drama; the classical spirit, fastening on its more formal character, long endeavoured to subject it to the so-called unities of the Greek Drama. But in England the perfect Gothic spirit received the highest expression hitherto manifested in the poetic and dramatic

form, in the pages of Shakespeare; and the classic school assailed its living power in vain. The result was otherwise in France. Corneille and Racine completely subjected their works to the Greek models.

We might similarly illustrate the proportionate influences of the classic spirit upon music, painting, sculpture, and architecture, but it will be evident that it would be in architecture, above other arts, that such a spirit would find its most definite expression.

Hence, Mr. Ruskin has a greater reform to effect in Architecture, than in any other art. He believes as, having learnt of him, do we—that the common notions about architecture as an art, are more fundamentally wrong, than about any other art. The following passage from the chapter on the nature of Gothic will indicate the fundamental error.

“It requires a strong effort of common sense to shake ourselves quit of all that we have been taught for the last two centuries, and to wake to the perception of a truth, just as simple and certain as it is new; that, great art, whether expressing itself in words, colour, or stones, does not say the same thing over and over again; that the merit of architectural, as of every other art, consists in its saying new and different things; that to repeat itself is no more a characteristic of genius in marble than it is of genius in print, and that we may, without offending any laws of good taste, require of an architect, as we do of a novelist, that he should be not only correct but entertaining.

“Yet all this is true, and self-evident; only hidden from us, as many other self-evident things are, by false teaching. Nothing is a great work of art, for the production of which either rules or models can be given. Exactly so far as architecture works on known rules, and from given models, it is not an art, but a manufacture; and it is, of the two procedures, rather less rational (because more easy) to copy capitals or mouldings from Phidias, and call ourselves architects, than to copy heads and hands from Titian, and call ourselves painters.”

Moreover, there is another reason why a reform is more needed in architecture than in any other art, or, at least, why it should be of wider, if not higher, importance. We have all more personal interest in it. If our neighbours write bad poetry, or draw bad paintings, we are not obliged constantly to read the one or contemplate the other. But there is no escape from architecture.—The positive effect, upon the European mind, of the base architecture of the eighteenth century, is, probably, far greater than we imagine. But, if architecture be truly an art, and, consequently, the essential element thereof be, not the engineering science of construction, but the expression of thought, in noble language of form and colour, and be, in very truth, an exhibition of man's delight in God's work; who shall estimate the negative effect of modern domestic architecture, the loss, especially to the multitude who seldom stir beyond the precincts of our great European cities, of all the stirrings of occult sympathies



with beauty and truth; of the suggestions, however faint, of faith and hope and love, of the witness for our inheritance of the past, and for our life in the future, of which a noble school of architecture is conceivably capable?

Amongst the most interesting of the particular subjects which Mr. Ruskin discusses, is that of colour. His views are startling, but, we believe, that they will throw light upon the previously unconscious experience of many which will reflect at least a partial witness for their truth. But we could not impart a just conception of his views on this subject without extracting more largely from his writings than space permits.

There is one portion of Ruskin's teaching as respects art, which is of the deepest and widest interest. It has relation to the very foundations of society, and is of great import to every class of people in Europe. The fact, that, in the pre-renaissance period, the workmen were severally artists, is capable of the most irrefragable proof. But the significance of that fact, and of its reverse in the past renaissance period, has scarcely, so far as we are aware, been indicated, with any clear apprehension thereof, by any but John Ruskin. We must extract at some length one passage on this subject, to give our readers a full conception of his views :

"Of Servile ornament, the principal Schools are the Greek, Ninevite, and Egyptian; but their servility is of different kinds. The Greek master-workman was far advanced in knowledge and power above the Assyrian or Egyptian. Neither he nor those for whom he worked could endure the appearance of imperfection in anything; and, therefore, what ornament he appointed to be done by those beneath him was composed of mere geometrical forms,—balls, ridges, and perfectly symmetrical foliage,—which could be executed with absolute precision by line and rule, and were as perfect in their way when completed, as his own figure sculpture. The Assyrian and Egyptian, on the contrary, less cognizant of accurate form in anything, were content to allow their figure sculpture to be executed by inferior workmen, but lowered the method of its treatment to a standard which every workman could reach, and then trained him by discipline so rigid, that there was no chance of his falling beneath the standard appointed. The Greek gave to the lower workman no subject which he could not perfectly execute. The Assyrian gave him subjects which he could only execute imperfectly, but fixed a legal standard for his imperfection. The workman was, in both systems, a slave.

"But in the mediæval, or especially Christian, system of ornament, this slavery is done away with altogether, Christianity having recognized, in small things, as well as great, the individual value of every soul. But it not only recognizes its value; it confesses its imperfection, in only bestowing dignity upon the acknowledgment of unworthiness. That admission of lost power and fallen nature, which the Greek or Ninevite felt to be intensely painful, and as far as might be altogether refused, the Christian makes daily and hourly, contemplating the fact of it without fear, as tending, in the end, to God's greater glory. Therefore, to every spirit which Christianity summons to her service her exhortation is: Do what you can, and confess frankly what you are

unable to do ; neither let your effort be shortened for fear of shame. And it is, perhaps, the principal admirableness of the Gothic Schools of architecture, that they thus receive the results of the labour of inferior minds ; and out of fragments full of imperfection, and betraying that imperfection in every touch, indulgently raise up a stately and unaccusable whole.

" But the modern English mind has this much in common with that of the Greek, that it intensely desires, in all things, the utmost completion or perfection compatible with their nature. This is a noble character in the abstract, but becomes ignoble when it causes us to forget the relative dignities of that nature itself, and to prefer the perfectness of the lower nature to the imperfection of the higher ; not considering that as, judged by such a rule, all the brute animals would be preferable to man, because more perfect in their functions and kind, and yet are always held inferior to him, so also in the works of man, those which are more perfect in their kind are always inferior to those which are, in their nature, liable to more faults and shortcomings. For the finer the nature, the more flaws it will show through the clearness of it ; and it is a law of this universe, that the best things shall be seldomest seen in their best form. The wild grass grows well and strongly, one year with another, but the wheat is, according to the greater nobleness of its nature, liable to the bitterer blight. And therefore, while in all things that we see, or do, we are to desire perfection, and strive for it, we are nevertheless not to set the meaner thing, in its narrow accomplishment, above the nobler thing, in its mighty progress ; not to esteem smooth minuteness above shattered majesty ; not to prefer mean victory to honourable defeat ; not to lower the level of our aim, that we may the more surely enjoy the complacency of success. But, above all, in our dealings with the souls of other men, we are to take care how we check, by over-requirement or narrow caution, efforts which might otherwise lead to a noble issue ; and, still more, how we withhold our admiration from great excellences, because they are mingled with rough faults. Now in the make and nature of every man, however rude or simple, we employ in manual labour, there are some powers for better things ; some tardy imagination, torpid capacity of emotion, tottering steps of thought, there are, even at the worst ; and in most cases it is all our own fault that they are tardy or torpid. But they cannot be strengthened, unless we are content to take them in their feebleness, and unless we prize and honour them in their imperfection above the best and most perfect manual skill. And this is what we have to do with all our labourers ; to look for the thoughtful part of them, and get that out of them, whatever we lose for it, whatever faults and errors we are obliged to take with it. For the best that is in them cannot manifest itself, but in company with much error. Understand this clearly. You can teach a man, to draw a straight line, and to cut one ; to strike a curved line, and to carve it ; and to copy and carve any number of given lines or forms, with admirable speed and perfect precision ; and you find his work perfect of its kind : but if you ask him to think about any of those forms, to consider if he cannot find any better in his own head, he stops ; his execution becomes hesitating ; he thinks, and ten to one he thinks wrong ; ten to one he makes a mistake in the first touch he gives to his work as a thinking being. But you have made a man of him for all that. He was only a machine before, an animated tool.

" And observe, you are put to stern choice in this matter ; you must either make a tool of the creature, or a man of him. You cannot make both ; men were not intended to work with the accuracy of tools, to be precise and perfect in all their actions. If you will have that precision out of them, and make their fingers measure degrees like cog-wheels, and their arms strike

curves like compasses, you must unhumanize them. All the energy of their spirits must be given to make cogs and compasses of themselves. All their attention and strength must go to the accomplishment of the mean act. The eye of the soul must be bent upon the finger-point, and the soul's force must fill all the invisible nerves that guide it, ten hours a day, that it may not err from its steely precision, and so soul and sight be worn away, and the whole human being be lost at last—a heap of sawdust, so far as its intellectual work in this world is concerned; saved only by its heart, which cannot go into the form of cogs and compasses, but expands, after the ten hours are over, into fireside humanity.\* On the other hand, if you will make a man of the working creature, you cannot make a tool. Let him but begin to imagine, to think, to try to do anything worth doing, and the engine-turned precision is lost at once. Out come all his roughness, all his dullness, all his incapability; shame upon shame, failure upon failure, pause after pause; but out comes the whole majesty of him also; and we know the height of it only, when we see the clouds settling upon him. And whether the clouds be bright or dark there will be transfiguration behind and within them.

"And now, reader, look round this English room of yours, about which you have been proud so often, because the work of it was so good and strong, and the ornaments of it so finished. Examine again all those accurate mouldings, and perfect polishings, and unerring adjustments of the seasoned wood and tempered steel. Many a time you have exulted over them, and thought how great England was, because her slightest work was done so thoroughly. Alas! if read rightly, these perfectnesses are signs of a slavery in our England a thousand times more bitter and more degrading than that of the scourged African, or helot Greek. Men may be beaten, chained, tormented, yoked like cattle, slaughtered like summer flies, and yet remain in one sense, and the best sense, free. But to smother their souls within them, to blight and hew into rotting pollards the suckling branches of their human intelligence, to make the flesh and skin which, after the worm's work on it, is to see God, into leathern thongs to yoke machinery with,—this it is to be slave masters indeed; and there might be more freedom in England, though her feudal lords' lightest word were worth men's lives, and though the blood of the vexed husbandman dropped in the furrows of her fields, than there is while the animation of her multitudes is sent like fuel to feed the factory smoke, and the strength of them is given daily to be wasted into the fineness of a web, or racked into the exactness of a line.

"And, on the other hand, go forth again to gaze upon the old Cathedral front, where you have smiled so often at the fantastic ignorance of the old sculptors: examine once more those ugly goblins, and formless monsters, and stern statues, motionless and rigid; but do not mock at them, for they are signs of the life and liberty of every workman who struck the stone; a freedom of thought, and rank in scale of being, such as no laws, no characters, no charters, can secure; but which it must be the first aim of all Europe at this day to regain for her children.

"Let me not be thought to speak wildly or extravagantly. It is verily this degradation of the operative into a Machine which, more than any other evil of the times, is leading the mass of the nations everywhere, into vain, incoherent, destructive struggling for a freedom of which they cannot explain the nature to themselves. Their universal outcry against wealth, and against nobility, is not forced from them either by the pressure of famine, or the sting of mortified pride. These do much, and have done much, in all ages; but the foundations of society were never yet shaken as they are at this day. It is not that men are ill fed, but that they have no pleasure in the work by which they make

their bread, and therefore look to wealth as the only means of pleasure. It is not that men are pained by the scorn of the upper classes, but they cannot endure their own, for they feel that the kind of labour to which they are condemned is verily a degrading one, and makes them less than men, never had the upper classes so much sympathy with the lower, or charity for them, as they have at this day, and yet never were they so much hated by them; for, of old, the separation between the noble and the poor was merely a wall built by law, now it is a veritable difference in level of standing, a precipice between upper and lower grounds in the field of humanity, and there is pestilential air at the bottom of it. I know not if a day is ever to come when the nature of right freedom will be understood, and when men will see that to obey another man, to labour for him, yield reverence to him or to his place, is not slavery. It is often the best kind of liberty,—liberty from care. The man who says to one, ‘Go, and he goeth, and to another, Come, and he cometh,’ has, in most cases, more sense of restraint and difficulty than the man who obeys him. The movements of the one are hindered by the burden on his shoulder; of the other, by the bridle on his lips; there is no way by which the burden may be lightened, but we need not suffer from the bridle if we do not chafe at it. To yield reverence to another, to hold ourselves and our lives at his disposal, is not slavery, often it is the noblest state in which a man can live in this world; ~~there is~~, indeed, a reverence which is servile, that is to say, irrational or selfish; but there is also noble reverence, that is to say, reasonable and loving; and a man is never so noble as when he is reverent in this kind; even if the feeling pass the bounds of mere reason, so that it be loving, a man is raised by it. Which had, in reality, most of the serf nature in him—the Irish peasant who was lying in wait yesterday for his landlord, with his musket muzzle thrust through the ragged hedge; or that old mountain servant, who 200 years ago, at Inverkeithing, gave up his own life, and the lives of his seven sons, for his chief?—as each fell, calling forth his brother to the death, ‘Another for Hector.’ And therefore, in all ages and all countries, reverence has been paid and sacrifice made by men to each other, not only without complaint, but rejoicingly; and famine, and peril, and sword, and all evil, and all shame, have been borne willingly in the causes of masters and kings; for all these gifts of the heart ennobled the men who gave, not less than the men who received them, and nature prompted, and God rewarded the sacrifice. But to feel their souls withering within them, unthanked, to find their whole being sunk into an unrecognized abyss, to be counted off into a heap of Mechanism, numbered with its wheels, and weighed with its hammer strokes; this, nature bade not,—this, God blesses not,—this, humanity for no long time is able to endure.”—“Stones of Venice,” vol. II. pp. 158-164.

The fundamental conviction, on which the reformation of architecture, which Mr. Ruskin preaches, is based, is, that, to use the words of Trench, “the word of the Cross had need, as a mighty leaven, to penetrate through every interstice of society, leavening language and laws, and literature, and institutions, and manners. For it was not merely that at that change the world changed its religion, but in that change implied the transformation, little by little, of every thing besides, every thing else had to reconstruct itself afresh.” Ruskin offers the evidence that art, under the influence of Christianity, was so transformed, and did reconstruct itself afresh, and that an architecture was developed, the distinctive character of which

had exact analogy with the distinctive character of Christianity; that, consequently, the return to the classical architecture, which, in its time and place, had been good, was a return to that, which, in the light of Christianity, was absolutely bad; and that the return was coincident with a remarkable spread of infidelity, of which it was the legitimate expression, and was attended with evil consequences, not inherent in the classical architecture itself, but, in the spirit in which it had been re-adopted; and, that the characteristics of the so derived renaissance architecture were 'pride and infidelity.' The evidence offered of those characteristics in the second Chapter of the third Volume of the "*Stones of Venice*," is arranged and stated with remarkable perspicuity and force, and we will not impair its force, by any attempt to offer an epitome thereof.

Mr. Ruskin appears, in his writings, in a twofold character, as a reformer in art, and as a moral teacher. We have endeavoured to indicate the principles, and the scope, of the reform which he desires to support; but our principal motive in commending his works for general study, is our conviction of the truth and power of his moral teaching, and the interest which his writings consequently have for all truth seeking men, whatever their special occupation in the world. The indestructible value of Mr. Ruskin's writings is dependent, in a measure, upon the special subject being one, which is commonly thought of as less connected than most others with the great purpose of existence, as being the world's play; and on that account, as well as from an erroneous impression of a legitimate predominance of imitation in the artist's function, is supposed to be peculiarly free from subjection to the great moral laws. The unexpected application of the highest truth adds to the force and value of the teaching, by its peculiar witness to the unity of Truth. Whilst the subject is special, the argument is general; and the very contrast between the narrow limits of the immediate purpose, and the unlimited scope of the discussion, almost forces the mind to apprehend, in some degree,\* that unity which is such that 'haply by long circuit of deduction all truth from any one truth might be derived.'\* These are the words of Hooker (we quote from memory, but we believe accurately), whose great work is pre-eminently characterized by its illustration of the unity of Truth. The following is one, among many passages of Ruskin's writings, explicitly declaring his apprehension thereof:—

"There is no branch of human work whose constant laws have not close analogy with those which govern every other mode of man's exertion. But, more than this, exactly as we reduce to greater simplicity and surely any one group of these practical laws, we shall find them passing the mere condition of connection or analogy, and becoming the actual expression of some ultimate

nerve or fibre of the mighty laws which govern the moral world. However mean or inconsiderable the act, there is something in the well doing of it, which has fellowship with the noblest forms of manly virtue; and the truth, decision, and temperance, which we reverently regard as honorable conditions of the spiritual being, have a representative or derivative influence over the works of the hand, the movements of the frame, and the action of the intellect."—"Seven Lamps," p. 4.

His aim is the all comprehensive one of the restoration of belief. In this conviction, that belief is the only firm foundation of individual and national stability, and that, that foundation is in great part wanting, he sympathizes with the most earnest and influential writers of the day. He is impressed with the primary necessity of rousing men to the recognition of the fact, that the whole structure of society in Europe has so small a foundation of belief, and, that its existence depends upon what reality of belief does still underlie our legislation, and administration, whether political, social, or ecclesiastical, and that all real civilization and progress are dependent upon a revival of belief.

This conviction is the key-note of the most earnest writing of the day, philosophical and religious, and, no less so, of the essays on art which we have under review. And what do we mean by belief? for there is a sense in which every generation believes in something. We mean an adequate foundation of all human action whatever, into which all laws, of whatever kind, may resolve themselves, and from which they may be all evolved—a belief, that is, in fundamental truth, and the necessary unity thereof. The world, practically, believes that Truth is diverse. The Statesman, the Lawyer, the Soldier, the Merchant, the Artist, and the Priest alike act and speak, as if they have different laws and prophets, as if Truth were not one—they concur to tolerate, or even approve, in one, what they would altogether condemn in another. What outrages on the moral law are tolerated in the lawyer—the artist is supposed, as such, to be under no law at all—the merchant is exempted from the condemnation which the world pronounces on gambling. The world condemns the common gambler or the so-called principle of expediency. It recognizes the disastrous consequence without perceiving the real evil principle, and consequently, it condemns and excuses according to the immediate results—the soldier is allowed some strange licenses, yet, strange to say, in spite of the large exceptions from the comprehensiveness of the moral law, the world, on the whole, makes higher demands on the soldier than all others. Hallam speaks of 'that prejudice which, in spite of moral philosophers, will constantly raise the profession of arms above all others.' One might dispute the absolute superiority, as asserted in the above sentence, but it is true in degree, and, in so far as it is true, it is founded upon no prejudice, but upon the feeling,

that, in its circumstances and requirements, its aims and its duties, the profession of a soldier is the type and pattern of all other professions. In what other, from the consecrated service of the Church downwards, does self-sacrifice find an equivalent expression? In what other is it forced upon a man, at some real peril of his worldly repute, that, before all things, he learn obedience, fortitude, and self-devotion; that he leave wife and children, houses and land, if need be, and putting his life in his hand, contend for right against wrong. It would be easy to contrast with the foregoing, a ridiculous statement of the actual circumstances, and aims, and notions of duty, of hundreds who profess the service of a soldier; nevertheless, it remains true, that if one state the highest principles of self-sacrifice, and obedience, in connection with the profession of a soldier, he is supposed to speak literally and reasonably; whereas, exactly the same expressions, with equal propriety applied to any other profession, are, at best, understood figuratively, and by many denied as being the expression of an unpractical enthusiasm.

Amongst the earnest thinkers of the present day, Carlyle is eminently conspicuous. We do not mean to give him the highest place, but assuredly he has a conspicuous place. He has a peculiar force, and a proportionate influence. We suppose that the instances are rare, in which he has failed to make a strong impression, and that those are still more rare, in which his philosophy has not been felt to be incomplete and unsatisfactory. That Ruskin himself has been much impressed by Carlyle is we think evident. We attribute an especial value to Ruskin's philosophy of life as the complement of Carlyle's. Both are profoundly impressed with the dignity of man's appointed vocation, whatever it may be. But Carlyle views man only as working and contending. There is no peaceful phase of life to him. His powerful writings contain fierce injunctions to work, and contemptuous mockery of the man who complains that he is not happy. His philosophy is crushing to the weak, although it may prove armour to the strong. There is no happiness in it. The nearest approach to happiness in it is a grim satisfaction in knowing one's road, though it be a dreary and difficult one, and in the consciousness of strength of will, which is the peculiar object of Carlyle's worship. The gladness of heart which is a Christian duty, and the mourning to which a special blessing attaches, as well as the meekness and poverty of spirit which inherit Earth and Heaven, find no appropriate place in Carlyle's philosophy. Ruskin takes for his theme, "Art," in its most comprehensive phase, as man's expression of delight in God's work, i. e., his expression of true happiness; and with this theme, he rises to views of life broader and truer than Carlyle's, for he does not on the other hand ignore the tragic struggle of

life, although his immediate theme be the expression of its happiness. Whereas Carlyle has little sympathy but with the strong, and the expression of strength. Singularly accordant with his partial conception of life, is Carlyle's impatience of the very subject of art. (excluding Poetry) to which he acknowledges in his *Life of Sterling*. Carlyle exalts the will, till it threatens to become its own law, to call itself "I am." Ruskin delights to illustrate its operation in that service which is perfect freedom. Carlyle would guide the passions. Ruskin seeks to train the affections. "The affections" (and we again quote Trench) "and the relations between God and Man are the only root out of which any poetry or art worthy of the name have ever sprung." This proposition is perfectly correspondent with that of art being the expression of man's delight in God's work. The affections are not only overlooked in Carlyle's philosophy; they are almost necessarily thrust out, because of the restraint, inherent in their exercise, which is liable to be antagonistic to the independent will.

No writer, more than Carlyle, delights to exalt Faith as exhibited in confidence and steadfastness of purpose. Let us hear Mr. Ruskin upon the same subject, remembering that the passage we quote is one in which he touches on it, merely incidentally, in discussing the typical beauty of Repose. :

"But that" (repose) "which in lifeless things ennobles them by seeming to indicate life, ennobles higher creatures by indicating the exaltation of their earthly vitality into a Divine vitality: and raising the life of sense into the life of faith,—faith, whether we receive it in the sense of adherence to resolution, obedience to law, regardfulness of promise, in which from all time it has been the test as the shield of the true being and life of man, or in the still higher sense of trustfulness in the presence, kindness, and word of God; in which form it has been exhibited under the Christian dispensation. For whether in one or other form, whether the faithfulness of men whose path is chosen and portion fixed, in the following and receiving of that path and portion, as in the Thermopylæ camp: or the happier faithfulness of children in the good giving of their Father, and of subjects in the conduct of their king, as in the 'stand still and see the salvation of God' of the Red Sea shore, there is rest and peace—fulness, the 'standing still' in both, the quietness of action determined, of spirit unalarmed, of expectation unimpatient; beautiful, even when based only as of old, in the self-command and self-possession, the persistent dignity or the uncalculating love of the creature, but more beautiful yet when the rest is one of humility instead of pride, and the trust no more in the resolution we have taken, but in the hand we hold."\*

Note both the catholic and the peculiarly Christian conception of the virtue.

If any of our readers who have, or shall have hereafter, read Mr. Ruskin's works, especially the "*Stones of Venice*," will turn to Carlyle's Essay intitled "*Characteristics*," in the second volume of his

\*Modern Painters, vol. ii. p. 62.



"Miscellanies," although it is not one which peculiarly illustrates the deficiencies of Carlyle's philosophy, we venture to say, that, whatever they may think of one or the other, they will be satisfied, that our connection of their two names is no arbitrary or fanciful association.

What truth Carlyle has apprehended, and it is no small or unimportant phase of Truth, which is the light of his philosophy, he has dinned into the ears of this generation with most forcible iteration, and he has done his work effectively, for good or evil. We believe on the whole for good; nevertheless the truth he offers, is but partial truth, capable of most pernicious combinations, and its principal deficiencies are in respect of the elements most peculiar to Christianity. Carlyle's philosophy, if treated as complete, and gathered up into any one fundamental principle, will not bear the Christian test. But any such completeness is, we believe, a forced character; it is in reality incomplete. It affords no fundamental principle, or common purpose, for all human action; it has not real unity; it is not that Truth to which one of the sweetest of English Poets has consecrated the name "Una."

A real apprehension of the unity of Truth, is the only firm foundation of effective belief, because Truth must be its own witness, and it is only in the apprehension of its all-pervading unity, that the force of its own testimony is fully felt. In these days, when Philosophy puzzles itself by painfully evolving such truisms as that we cannot prove Truth, we particularly need to be made to feel, in all ways, that, in everything, Truth is and must be its own witness,—that fundamental Truth being the relation of each thing to its first cause, and Good the operation of Truth, there is nothing higher or antecedent by which to prove it,—that Truth has come a light into the world, and it is not our business even to test its power by shutting our eyes and abiding in darkness, but to walk by it and be thankful for it. We mean not hereby to assert anything of the degree, or of the causes of the vast difference of degrees, in which men have the power of discerning Truth, of perceiving its light at all, or of distinguishing its light from the glare of false fires; we mean only to assert, that, whilst the allegation that Truth bears witness of itself is just, the inference, that the record is inadmissible, is as illogical as it is impious; and that in its all comprehensive unity is the force of its testimony. Hence the fundamental character and eminent value of all books which afford effective practical teaching of the unity of Truth.—A philosophical disquisition thereon may command a speculative assent, but perhaps scarcely stir the heart, and faintly stimulate the moral sense; but the indirect teaching, in writings like Mr. Ruskin's, has the subtlety, and force, and catholic aptitude of parables.—He asserts that the functions of the artist can

be rightly performed, and the true purposes of art fulfilled, only when viewed in relation to the highest purposes of existence, and exercised under the observance of all that is comprehended in the two great commandments, on which hang all the law and the prophets. He shews how all that is greatest in art has been attained by the observance of the great laws of self-sacrifice, veracity, temperance, and love, which are the foundations of all moral greatness; he shews the most striking analogies between the spirit of the architecture of Venice in successive periods, and the spirit of that great Republic in its rise, in the zenith of its power, and in its swift decline. The minutest analogies of moral and artistic truth are endless, and, in their aggregate witness, consists the weightiest evidence for the general truth of Mr. Ruskin's views.

We have not proposed to ourselves to justify Mr. Ruskin's views respecting art, but only to state them; and we have done that but partially and feebly. We believe him to be, on the whole, right.—To say that he is a reformer, is to say, that the faults of the man, whatever they may be, must be conspicuous. Open aggression must, of necessity, appear violent and one-sided. One man boldly asserts, that the tradition of several generations is false, and must be abandoned. He comes forward as the champion of the truth, in the sole confidence that truth will prevail. We have endeavoured to illustrate his principal propositions respecting art; but in detail, we have offered neither criticism nor defence. Mr. Ruskin's writings contain their own defence, written with remarkable perspicuity, an extraordinary fulness and aptitude of illustration, and surpassing eloquence.—Our purpose has been to induce our readers to read and judge for themselves.

As we do not defend, so we do not blame. From the writings of one so remarkably fearless in stating all legitimate inferences from his propositions or conclusions—in the course of many volumes of earnest discussion, in which every passing fact and thought is seized and compelled to render such service as it may to imperious Truth, who haply sometimes suffers from the treachery of the unwilling servant, it would be easy to extract inconsistencies, still easier to select propositions which, isolated, might appear inexcusably dogmatic, extravagant, or false; nor can we be surprised, if accumulated irritation from the stings of malicious criticism, and the unavoidable heat of earnest argument, have sometimes caused a contemptuous tone which a calmer mood would soften, and perhaps a more impassioned hostility than charity to unwillful error can approve. But unsparing as are Ruskin's judgments of error, it is in his sympathy with what is beautiful and true that his spirit finds its fullest utterance. Whatsoever things are honest, just, pure; whatsoever things are lovely, of good

report, if there be any virtue, if any praise, they who think on these things will find them offered in loving profusion in Ruskin's works.

We can understand that the professional artist, fully imbued with all that Ruskin desires to reform, and studying his works with purely professional aim, and through the medium of his own prejudices, whether true or false, may without violation of his moral sense fail to perceive their force and value; but the ordinary reader must have strangely perverted sympathies, if the garden of fruitful thoughts and bright imaginations which is spread before him in these volumes appear to him but an uncultivated wilderness.

The unity of Truth, as affording a common purpose to all action whatever, has its simplest expression in the sentence, that, whether we eat or drink or whatever we do, it is to be done to the glory of God. If Ruskin had said that, and St. Paul had not, we believe it would be regarded by many as equally absurd and profane. For, it is vaguely imagined, that such is the ultimate purpose of life in the general, but not in the particular, and it is not vaguely imagined, it is, as distinctly, as erroneously, imagined, that there are many duties which can be equally well performed without reference to that purpose, and that a large portion of our duties are either altogether of that class, or have so slight significance, that any conscious reference to that purpose is unnecessary. But, under the protection of St. Paul, we may safely repeat the statement, that the ultimate purpose of each several action ought to be the glory of God, and with no lower motive do we commend to our readers the writings of John Ruskin.

## ART. II.—THE MORALS OF THE INDIAN ARMY.

1. *Tukfield, or Fellowship in the East.* By PUNJABEE. 2 Vols. London. Longman & Co. 1853.
2. *Records of the Indian Command of General Sir Charles James Napier, G.C.B., comprising all his General Orders, Remarks on Courts Martial &c. &c.* Compiled by JOHN MAWSON. Calcutta. R. C. Lepage & Co. 1851.

IF war confers no other benefit upon mankind, at least it makes a commotion in our hearts ; stirs up our feelings, the bitterness and sweetness of which are both intensified ; the bitterness being then thrown off on our enemies, the sweetness reserved for our friends, and particularly our protectors, to whom our sympathies are given *de profundis*. Hence the singular and pleasing contrast between the sentiments with which the British public regarded military officers a short time since, and those which they express now. The gallant fellows are undergoing severe trials, exposing their lives, performing deeds of wondrous daring for their country's sake. God bless them ! We should like to shake hands with them all, drink their healths a hundred times ; fling up our caps and rend the air with hurras for every officer in the British Army. But we are sure they themselves will not object, if after our fit of enthusiasm has passed, we regard them as Christians and gentlemen, as well as soldiers, and, having given them the honour due to their martial prowess abroad, treat them as members of society at home. And if they see us finding fault with them in this character they must not attribute it to civilian jealousy. On the contrary, it is because we regard them as a constituent part of the nation, as members of our large family ; not only as men who fight for us, and are so far outsiders ; but as friends who live with us, are perhaps joined to us by the ties of consanguinity and mutually kind offices, in whom we really wish to feel as much interest as in persons of our own class and calling.

The moral condition of the Army has of late years attracted an unusual amount of attention, and has been discussed not only in ephemeral works, but also in periodicals which represent the most gifted minds of Britain. It has also been a subject of oracular remarks in official adjudications, and the authorities have occasionally in elaborate documents expressed their opinions on the general question. With scarcely an exception the authors of all these productions are military men. Some have taken one side ; some the other. The only difference has been in the organs which they have

selected for their utterances. If an officer wished to denounce the immorality of the Army, he has written, either a separate book, or an article in one of the ordinary periodicals. If he has determined to enter the lists in defence of his cloth, he also has either published a book, or, if he contributed to a Magazine, has invariably chosen one devoted to military topics. Thus, cancelling the separate works which are common to both sides, we have one class of periodicals ranged against another class. The affirmative of the question, whether the morals of the Army are respectable as compared with other human associations, is taken by the *United Service Journal*, *Naval and Military Gazette*, and other professional publications; the negative sentence is pronounced by the ponderous *Quarterlies*, pleasantly discussed by the *Monthlies*, roared out with the objurgations of the *Thunderer*, or squibbed off in the satires of smaller newspapers. But we repeat that all the elaborated arguments are the productions of military men.

Now when these appear, in what may be called the civilian class of periodicals, their unanimity is remarkable. We have the *Quarterly* finding fault with the education of the army, Fraser complaining that the Army is famous "for an exceeding laxity of morals, more especially in the department of inebriety," Dickens representing the modern officer as a flash spoonv, talking a little about sporting and more about "that gaerl at the pastrycooks," or betting about "the barmaid of the Rose and Crown," and Pontet's cigars; dividing his mornings between Courts Martial, and a particular friend in a fustian suit, brown leggings, highblows, a white hat with a black crape round it, and a very red nose, who just steps up to say that "the bedger *must* be dror'd that mornin'." All Lever's works too, written as they are in the spirit of a comrade, have yet the same tendency as the others; for they certainly represent an officer as a man who is in earnest about nothing, and whose conversation is either amatory, trifling, or solely confined to "shop."\*

But these heavy guns, random musket shots, and irritating squibs did little damage, until an unfortunate affair held up an object at which all could not fail to take a correct aim. By a chance brawl Her Majesty's forty-sixth regiment was brought to the light, and it looked very hideous; at two Courts Martial its officers, whether prosecutors, prisoners, or witnesses were shewn to be so far below the tone of what is called good society, and wanting in manly candour, that the public were shocked by the simple statement of the case, without any dressing of facts, envious exaggerations, or flippant

\* *Quarterly Review* for 1848. *Fraser's Magazine* for 1848. *Household Words*, Vol. i.

satires.\* The result was a wide spread belief in the depravity and coarse vulgarity of the Army, for which the offences of one regiment were an insufficient foundation.

Present evils are ever thus magnified. They fret and excite us, which the crimes of our forefathers do not; so that we ever have a tendency to heighten the defects of our age. As in the days of Horace, men still think our time worse than that of our ancestors, and fear that our descendants will be even lower in the scale of morality. The truth of the matter is: the British army is not more immoral than it was. A large class of proverbial expressions, and writings of old authors, all shew that formerly Military license was unbounded, that debauchery and profanity were almost thought essentials of good soldiers, and that for them not to do evil was in itself an evil.† Shakspeare represented them as he found them: Sir John Falstaffe leading his "hundred and fifty tattered prodigals," Nym, Bardolph, and Pistol, Fluellen, Cassio, are his commissioned and uncommissioned officers.

But now comes the the question, Is the British Army more moral than it was? We can easily shew that the improvement of the people generally has been most marked, if we go back no further than the last century. In the best society hard drinking was then common. But only fifty years ago, gentlemen were rarely in a condition after dinner to join the ladies who perhaps were left to the enjoyment of Mrs. Behn's indecent novels. The booksellers' shops of London teemed with smutty works, which were openly exposed for sale; the street ballads were such as a mob even would not now listen to; fourteen "cock and hen clubs" between Blackfriars and Westminster Hall, the Dog and Duck, the Apollo gardens, and Temple of Flora, were places where the nobility, gentry, and tradespeople resorted to smoke, swear, drink and hear obscene songs. The Lord's Day was desecrated far more than it is at present. The amusements of the lower classes were duck-hunting, badger baiting, and throwing cats in the water to be worried by dogs. Between 1732 and 1742 intemperance progressed in a higher ratio than had been known before; the consumption of spirituous liquors increased

\* Men who "don't remember" are of course unaware that, according to the language in which their religion was clothed, a person is not true unless he is without forgetfulness (*ἀληθής* *α* and *λήθη*)

† How neat and condensed is the allusion of Euripides to such a state of Military society.—

εν γὰρ μυρίῃ στρατεύματι

Ἀκύλαστος ὄχλος, ναυτικὴ τ' ἀναρχία,

Κρείσσων πυρός· καὶ δὲ μή τι ἄρῶν κακόν.

Hecuba, 606 &c.

from 10,500,000 gallons to 19,000,000, so that in the latter year as the population of England did not exceed six millions, each individual must on an average have drank three gallons; whereas now we have the satisfaction of knowing that the consumption is not more than half a gallon per head. Then as was stated by a competent witness before a parliamentary committee, publicans were in the habit of attracting customers by announcing in large letters on the fronts of their houses—"You may here get drunk for a penny, dead drunk for two pence, and have clean straw for nothing." In brief the improvement, as regards public and private decency, amongst the higher, middling, and lower classes is at once encouraging and astonishing.

Is there a corresponding improvement in the Army? As regards religious observances, and even religious and moral feeling, we are sure there has been a positive decline. In the wars of Marlborough a close attention was paid to divine ordinances and also to the morals of the soldiers. Every regiment had its Chaplain, and on the eve of the battle of Blenheim the army was paraded for Divine Service, after which Marlborough summoned all the officers, who could be spared from duty, to join him in partaking of Holy Communion. In like manner Archdeacon Coxe, his biographer, tells us "that Marlborough discouraged all intemperance and licentiousness in his soldiers, and constantly laboured to impress them with a sense of moral duty and Supreme superintendence." Daily, both morning and evening, Divine Service was performed; before every battle prayers were offered at the head of every regiment; after every victory a solemn service of thanksgiving was performed. "By these means," writes the Archdeacon, "his camp resembled a quiet well governed city; cursing and swearing were seldom heard among the officers: a drunkard was an object of scorn, and even the soldiers, many of them the refuse and dregs of the nation, became, at the close of one or two campaigns, tractable, civil, sensible, and clean, and had an air and spirit above the vulgar." Such amongst disciplined bodies of men, whether large or small, is the result of a Commanding Officer's earnestness and moral superintendence. Much, if not all, depends on the man who commands a regiment or an army. With all his vices Marlborough was most anxious to see others moral and good. And what a contrast was the state of matters in his army to that which prevailed in the last "Peninsular war! There was then not a Chaplain to a division. "Poor fellows!" said Lord Hill, when an officer of the staff regretted the prevalence of Methodism in the division, "Poor fellows! Well, I am very glad of it; it is the only chance of religion they have." Therefore we think that the Army must have made a retrograde movement from

morality since the days of Queen Anne's hero. Some ground we trust has been regained, but not all. The present war has exhibited favorable and encouraging symptoms. Amongst officers and men there has been an increased observance of religious forms ; moral discipline has been well maintained ; one Society has taken energetic measures to supply the Army with clergymen, others to send out Bible readers, whilst heroic ladies have taught a practical lesson of self-devotion and Christian love, which cannot fail to make converts, and persuade many a soldier, when his heart is softened by affliction, that once more Christianity is proved to be not a sham but an evangile, a bringer of great joy, a strong consolation, and a vital power.

And what evidence have we to shew the present condition of the Indian Army ? Is it possible to arrive at tolerably correct conclusions regarding the moral state of officers and men ? The latter will require a separate article ; but we will endeavour to sift the testimony of such witnesses as have stated to the world their opinions of Indian officers. We will strive to efface from our minds the wrong impressions which untoward affairs are continually stamping upon them. We will remember that human nature too often finds a grim satisfaction in passing harsh judgments upon bodies of men, and that a thousand circumstances, frequently infuse into men's minds acrid and angry sentiments regarding their own comrades and associates. We will not conclude that a discontented officer is an impartial judge of his brother officers' conduct, much less that civilians, who generally differ so much from them in education, tastes, and habits, are always competent to review the lives of the military. We will not form our opinion of the majority from the scandalous behaviour of the few, or the censures of the fastidiously virtuous. We will deal them the same measure that we would to others. We have learnt for example to believe that Roman Catholics are not all which " the awful disclosures of Maria Monk " represent them to be, that the Church of England is not necessarily unsound from head to foot, because she has the putrefying sore of a purse-proud priest, or that Methodism is immoral, because we read in a newspaper paragraph, that a preacher on circuit stole his landlord's shirt. We will argue on the ground of statistics, or, where those fail us, we will take care that our premises are such as are generally admitted, and that even if our reasoning appear fallacious, our judgment shall be charitable, our disposition fair, our heart genial and sympathetic.

What do we consider that a soldier ought to be ? We agree with Mr. Arnold that, according to the true idea, he is " a Christian, a man, a gentleman—graduating downwards, but including all three." There may, we fear, be in some quarters a difference of opinion as to



the necessity of the Christian part of this definition; yet surely it cannot be denied that in nine out of every ten Courts Martial the prisoner would never have been tried "for conduct unbecoming the character of an officer and a gentleman," if he had acted as a Christian. Although it would not be true to say that a good Christian must be a good officer, yet the converse is demonstrable, for an irreligious man cannot be a good commandant of European troops. He may do all that zeal, smartness, energy, knowledge of his profession and soldier-like bearing can do; his troops may appear well on parade; severe punishments, and even well-timed kindness, may reduce his defaulters' list, and, above all, he may create what is so very valuable—enthusiasm for the service; so that we admit an irreligious and an immoral man may do a great deal; but he would do more if he were a good Christian. And we maintain that the tone of the European portion of the Army can never be raised except by Christianity. That alone will lead officers to instruct their men by example in the importance of self-government and moral discipline: that alone will teach them to feel a real interest in the souls and bodies of all who are under their authority, so as to elevate the characters of both the men and women of their regiments; for it is impossible that the former can rise very high, whilst the wives and mothers remain low and degraded.

The ideal of an Indian officer as exhibited in the light works of the day is something of this sort: A lad who has shown no ability at school except for getting into scrapes, suddenly appears in this country with a shell jacket, long sword, and vicious tattoo; drill he is condemned to learn, but learning to smoke any number of cheroots is far more to his taste, and he engages in it with patient industry; knowing no more of the world than a child, he seems to think that a swaggering address makes him a man; his amusements are pig-sticking, peacocking, striving to become a hero at billiards or on a race-course—"le Wellington des joueurs"—and, when at home, watching the clouds of smoke which curl upwards from his lips, whilst he is seated with his feet on the wall or the back of a chair, and a glass of brandy and water by his side; his employments are parade and the study of Hindustani, which is his sole literary acquirement—amusements and employments which furnish the staple of his conversation every night at mess. Thus he continues for a short period, when, after a brief struggle with parental warnings and his own conscience, he dips into the Banks, jokes about his accumulating debts, learns to regard every tradesman as one who was born "for hasty credit and a distant bill," and thinks none respectable who does not like "liberal Brookes exult to trust and blushes to be paid." He has no refined tastes, no mental discipline, no suffering,

no earnestness, no practical charity, no knowledge of others' miseries. Such is the shocking picture which caricaturists and writers of little tales draw of a young Indian officer.

Our ideal is utterly discordant from this. We suppose that the young officer has received such an education, as, without cramming him, may 'strengthen his reasoning powers and give him some aptitude for study. If, in addition to the smattering of Arithmetic, French, Geography and Fortification which is considered essential, he is well acquainted with our best military histories and the Duke's despatches, he thus gains a certain kind of literary taste and professional knowledge. His amusements invigorate instead of enervating his body and mind, and he endeavours with all his might to gain a practical insight into the country and to qualify himself for situations of responsibility. He learns the native languages, knowing that in themselves they are utterly valueless, and open the way to no stores of literature, but that they are important as means of making himself useful and attaining the objects of a creditable ambition. Above all, he is the soul of honour, and he abhors that conventional gentility which will permit a man to cheat tradesmen of their dues, but not brother officers of their gambling debts. He shrinks from that life of intense selfishness which is peculiarly Indian, unchains his sympathies, seeks for objects of kindness and regard, and, as his own cheek glows with pleasure when encouraged by a superior's kindness, so he is anxious to encourage and gladden his inferiors. Such is what we wish to see every officer in India.

But we are Utopian; are we not? Of course we are; for we maintain that *the attempt* to form such characters is a possible work; although it would be visionary to hope that it will in all cases be successful; and where there is a prospect of doing good, how must be the mind which can obscure it by merely uttering a contemptuous epithet. "Quixotism, or Utopianism: that is another of the devil's pot words. I believe the quiet admission which we are all of us so ready to make, that, because things have long been wrong, it is impossible they should ever be right, is one of the most fatal sources of misery and crime from which this world suffers. Whenever you hear a man dissuading you from attempting to do well, on the ground that perfection is 'Utopian,' beware of that man. Cast the word out of your dictionary altogether. There is no need for it. Things are either possible or impossible—you can easily determine which, in any given state of human science. If the thing is impossible, you need not trouble yourselves about it; if possible, try for it. It is very Utopian to hope for the entire doing away with drunkenness and misery out of the Canongate; but the Utopianism is not our business—the *work* is. It is Utopian to hope to give every child in this

kingdom the knowledge of God from its youth but the Utopianism is not our business—the *work* is\*.”

With regard to the European portion of the Indian Army, we know what it was formerly. It was, as Clive described it, “the refuse of our gaols”; commanded by an officer whose rank was inferior as his character, and was generally “without order, discipline, or military ardour.” The heavenborn conqueror himself did much, very much, for its improvement, and since his time it has gradually advanced; but still has by no means kept pace with the progress of society in England. Books and official records both give a painful, and we think an exaggerated account of the moral condition of its officers. In reviewing their statements and opinions we are anxious that they should be kept distinct from the conclusions which we shall eventually draw.

We commence with a work which has created some sensation both in England and India, and, although of no great literary pretensions, has already reached a second edition. “Oakfield” is the true history of a mind, and in this is its charm. That mind is not a sound nor very amiable one; but it is mobile, intelligent, and earnest; it has a restless consciousness, working, not in ignorance, but under the influence of a high education. And what can be more interesting than the portrait of an active mind? Murillo could lead us to look with delight upon a Spanish herd-boy; Reynolds has endowed a London beggarman with an air of romance; and Shakspeare could make as much even of an ordinary mind, as the painter’s brush of an ordinary man. Oh! for the power to draw out that busy airy little Psyche which dwells within every man, to trace its history, its loves and hates, pleasures and disgusts, its struggles and aspirations; to see truly, although as through a microscope, the precise work which each intelligence contributes in the mysterious career of the human race.

Now “Oakfield” shews us what a soul separated, as it were, from the World’s Soul thought, felt, and acted in our particular sphere. It emanated from England, and shuddered to find itself in India. Like Pandora it seemed as if not knowing what to make of the new world. It found few congeners for associates, and after trying in vain to make a home here, it glided back to its native heaven—a snug little cottage at the English lakes.

The real hero and author of the work is a son of the eminent Dr. Arnold, who has inherited his father’s independence of mind, restlessness of thought, dissatisfaction with every thing that is, and earnest desire for moral and intellectual progress. He went to the

\* Ruskin on Architecture and Painting, Lecture II.

University of Oxford, and was shocked to find that he liked it. He thinks it a place where a small income can procure such refined pleasures as only an enormous fortune can command elsewhere, "where common respectability is a pass to the flower of English society; where the regularity and cheerful monotony of monastic life are combined with the manly energy, the rare independence, the luxurious refinement, which are so characteristic of our modern English Universities." His life was calculated to make him feel the attractions of such a place, for his mind was neither worn out by intense study, nor precocious dissipation. His abilities were sufficient to place him with moderate labour in a second class, and to leave him plenty of time for healthy recreation.

But Oakfield, or rather the man who pulls the strings, and exhibits his somewhat grotesque movements, woke up from a pleasant dream to see that Oxford is not life. What evidently, more than anything else, made him grow weary of the place was its decent orthodoxy. He had some honest and earnest, but rather wild notions about religion. Perhaps we shall not be kept from our object, if we inquire what those were.

To Dr. Arnold, the father, the Thirty-nine Articles were, as is well known, a grievous stumbling block. When asked to swear to thirty-nine his conscience was not so capacious as Theodore Hook's, and he could not say, "Oh! forty if you please." Not that he cared for their Erastianism; on the contrary, that sugared them to him; he could also have taken their Calvinism, by making a good gulp; but he had *thought* too much, to like all their theological definitions. The son had all the parental scruples, and in him they were invincible. Besides, the Church of England seemed dull and vapid to his ardent mind. One thing he did like in it, and that was "the gentlemanly element." What this is, we really cannot say. Mr. Arnold thinks it is "the seemliness of its ordinances and ritual"; but really its services used not to be very winning even in London, where the mis-pronunciations of clerks, and the grating hymns of clarity children, even when the parson was genteel, were offensive to good taste. Still in spite of these and other vulgarities, the Church of England was always regarded as a *gentlemanly* Church, and so was even the sister Church of Scotland, when her clergy were half-beggars. The nasal twang of the hymns was not so loud as in dissenters' Chapels, there was less cushion thumping, and no shocking expostulations with the Deity, so the Church was tolerated by gentlemen. But the young Oxford graduate wanted something more positive. Would not the Tractarian movement do for him? No; he hated such "surplice follies." Would not he try Exeter Hall? No, he replies, "I admire and revere the excellence of

many individuals calling themselves evangelicals, but I do think that their party bitterness, and ignorant self-satisfied narrow-mindedness, has done more harm to the cause of good than the great Popery lie itself." In one passage he hints that he would like to bring Cromwell and his Puritans back again; but this we take to be the flam of Carlyism. If Praise-God Barebones and his crew were now upon earth, what sentiments could they have in common with the fastidious young Arnold and the Deistical Carlyle? It is mere foppery when the Puritans are sighed for by a man who likes nothing in a Church but its "gentlemanly element," or one whose heroes are Rousseau and Burns, Luther and Knox, Mohammed and Odin.

But our author, or his hero, evidently considers that he belongs to a select few who are isolated and misunderstood. He had a "theory," as he calls it, "of bringing religion into daily life," and regarding Christ as the one-thing needful. Singularly enough he got hold of the notion that India would be a good country in which to practise this. In the colonies he expected to find freshness and activity of mind; and as to India in particular, he asked, "was not every European in India engaged in the grand work of civilising Asia?" "A man there must almost feel his very existence as one of the English possessors of India, of some historical dignity, and the first steps in active life bring him at once to real, immediate concern with the world's march."

So Oakfield or Arnold comes to this sunny land as a cadet. Here he stands in a triune character—as Bachelor of Arts, Poet, and Ensign in a native regiment. This trefoil of names looks pretty enough, but we must admit that the character is not adapted to make a man contented with himself or with all around him. Oxford reminiscences and nights at mess, sonnets and drill, flowers of imagination and realities of griffinage—each of these is good in its way, but naturally they have not dualistic tendencies. Then the atmosphere here is not salubrious for religious or earnestly moral aspirations. So that we cannot expect that our author's survey of his new stage and its actors will be very satisfactory.

He expresses his opinion of us very freely. He does not like us at all. "The first experiences of Indian society," he says, "are to most disappointing and often shocking." He divides this society into three classes; the first try to relieve the tedium of life by work, and live in a state of feverish excitement; the second take to drink, and hurry through delirium tremens to the burial ground; the third and largest class are dissipated idlers, who drink or gamble, but not outrageously, and pay attention to nothing but trifles. In short we are all "more or less vicious, but always shallow, empty, contemptible." There are a few intelligent men amongst us, but

these have only a *beaver* kind of intelligence, and are not profound or in earnest. Absence of wit, and stupidity characterize the majority, and generally "gross wickedness goes hand in hand with gross blockheadism." That society should be so degraded is a fact for which it is difficult to account, but there is something in the country which makes men's minds as muddy and pasty as their faces. Some of these remarks are of course the biting criticisms of a disappointed man; but the result of Mr. Arnold's cool reflection after he had resided some time in England is thus given in the Preface to his work :—

"They speak ignorantly who speak in sweeping disparagement of the two services; there is much of gallantry and patient endurance in the one, much intelligence and laborious energy in the other of them. But it cannot be denied that there is a want of earnestness; a want of moral tone, and, together with much superficial scepticism that would pass for freedom of thought, a want of liberality, greater than exists in corresponding classes of society at home. If this were not so, the greater part of 'Oakfield' would be false; it is because I believe it on the whole to be true, that I have, after all, determined to publish it."

But Oakfield's descriptions of men refer almost exclusively to military society. His first year was sufficient to dispel all his romantic visions, and he coolly declares that, of the officers whom he has met, nine out of ten are "mere animals, with no single idea on any subject beyond their carcasses." Gentlemanliness is wanting, and that not only in its higher elements, but as regards mere refinement of manners. He protests that, having been both at Winchester and Oxford, he is by no means squeamish, but that if such "appalling ribaldry" were heard at either of these places as he had heard at mess, the offender would be kicked out of the room. Provided men were reasonably decent before the cloth was removed, any amount of blackguardism was tolerated afterwards. No school or college could furnish a parallel to such a low-principled tone of society.

After expressing his disgust in this style, Oakfield thinks it fair to state that the corps which he had joined was perhaps the worst in the service; but then he is posted to a *crack* regiment, where he has a change but not a cessation of annoyance. There is the same coarseness of mind, yet not such coarseness of language. Refusing to fight with a bullying duellist, he is brought before a Court Martial, and although acquitted, loses his reputation, which he only regains after his bravery has been exhibited on the battle fields of the Punjab.

The book contains some skilful descriptions, sound thinking, and pathetic sentiments; but the characters are not cast with sufficient

tact and judgment. With the exception of two or three "superior young men," all the officers who appear on the stage are thoroughly unprincipled. The principal is Cade, "as good hearted a fellow as ever lived," which descriptive formula is supposed to include a vast power of blackguardism; good-natured enough he was when it cost him nothing to be so, and he could have his own way; but at all times ignorant, coarse and selfish. This gentleman, we are told in the Preface, is a fair type of a class whom Mr. Arnold had frequently met in India. After Cade has been disposed of, the next person who crosses our hero's path is Stafford, a man who by the force of swagger has cowed all his brother officers into submission. Then there is a sneaking cur who is Mr. Stafford's 'friend,' and being too pertinacious in insisting that Oakfield should fight his principal, is brought to his senses by a sound thrashing; there is Captain Colt, the senior officer at mess, a lion-entity, who like a good Bishop lives only for peace and quietness, and when his boys quarrel turns his head another way, or merely says, 'Be gone brave army, and don't kick up a row'. Other professions are dismissed in the same way. The Civilians of the piece, excepting only the one who has the privilege of Oakfield's acquaintance, are quiet gentlemen with pleasing manners, good tailors, and limited education, *bene nati, bene vestiti et moderate docti*. The newspaper editor is a Scotchman (why are all Indian Editors Scotchmen?) with yellow hair, dirty nails, and all the air of an impostor, who leaves the stage in a cloud of brimstone after borrowing five pounds and libelling his benefactor. The Chaplains are respectable dolts; the Doctor is of about the same calibre as the old barber-surgeons; Chaplain and Doctor are led into a maze by Mr. Arnold's hints upon religion, and of course neither can fathom the mysterious depths of his mind. In short, the moral defect of this work is, that, not content with exposing vice, the author looks superciliously upon respectability. Whenever he meets with every-day people like ourselves he points his nose up into the air, passes on, and soon ceases to remember that such "rubbishers" ever existed.

Mr. Arnold has fallen into the youthful error—which a few words in his Preface cannot redeem—of passing an indiscriminate censure upon society, and particularly upon military society, in India; but we should be only following the leader if we were on that account to reject his testimony as valueless. He is no anonymous scribbler, whose sport is human guilt; but a young gentleman of education and refinement, who had made his way through a public school, and enjoyed the society of an English University, and in consequence never could take to a mess. In his hyperbolical style he denounces its conversation as "wretched, half-sporting, half-fashionable, all-silly, and consequential gossip," and writes as if one "could hear nothing

there but "Smith's plucky proposal to run his notable tat 'Pickles' against Brown's hitherto unvanquished 'Devil's Dust' for a mile and a half, owner's up, for ten gold mohurs; or how Walker backed himself to drink six bottles of beer and walk home after it." Such words he represents as spoken from the abundance of the heart, and therefore as correspondent to the speaker's actions. In short, his estimate is the very lowest which can possibly be taken of any society; for although either intellectual vulgarity or refined dulness is supportable, yet when neither the intellect nor the refinement is there, we have only dull vulgarity as the product of our equation, and that is intolerable. It is moreover with rare exceptions vicious. It knows no ennobling principles, is quickened by no generous impulses, is not drawn from an indulgence of the senses by any important occupations. It lies down in the mire, cannot gaze at the glorious world above it, utters nothing better than a grunt, feeds upon offal, and when it ceases to exist, the only notice taken is—that we observe an empty sty. Such, we conceive, is a fair picture of dull vulgarity, and this Mr. Arnold represents as the characteristic of military society in India.

Leaving this heady but clever writer, we will now endeavour to form an opinion of our own; but before attempting to estimate the morality of the Army, we wish to say a few words regarding the offences of general society. It is extremely difficult to ascertain any data for a comparison between the Army and other societies which will approve themselves to our sense of justice and the candour of our readers. Works of fiction and declamatory articles in magazines and newspapers assist us but little in forming a correct judgment. They are the testimonies of individuals, and so far useful; but their facts are usually overlaid with several coats of prejudice, partiality, and rhetorical exaggerations. Statistical tables indeed enable us to approach precision in estimating the condition of society, but military offences are of a distinct class, and those of officers, which we are now particularly to consider, have in most instances no analogy with violations of criminal and civil law. Still by considering the statistical returns of England we may arrive at some not unimportant conclusions.

In examining these we classify offenders firstly, according to the degree of education they may have received, and secondly, according to the nature of their crimes. The divisions according to education are three, the first including all such persons as can neither read nor write; the second all such as can read and write; the third all such as have received a so-called superior or liberal education. We do not exactly know the qualifications of those we thus place in our third class, but the framer of the tables from which our



figures are taken assures us that they are not necessarily high, and are comprised in a small amount of knowledge added to reading and writing; indeed such is clearly the case, for we shall see that in some instances they have been possessed by servants. So that of course every officer of the Indian Army would be allowed to stand in this class.

It is pleasant to see how small is the number of committals from this educated class, and how even this small number is reduced when we come to ascertain the convictions. Taking 1840 as the middle year of ten years, and as shewing a fair average—for, although there were 176 committals in 1836, there were only 65 in 1842—we have that year in the whole of England and Wales no more than a hundred males of superior education committed to take their trial, although the same year upwards of seven thousand males who could neither read nor write, and fourteen thousand who could merely read and write, were committed. Of these hundred persons, fifty nine only were convicted, and those belonged to twenty counties, containing a population of 8,724,338 persons. So that there was but one conviction for 147,870 inhabitants. The remaining thirty-two counties, including Middlesex with its 1,576,616 inhabitants, did not furnish a single convict—"a fact which," as our authority states, "considering the diversity of conditions and occupations, and the amount of temptations that assail its inhabitants, it would be most difficult to believe upon any testimony less certain than that of official returns."

Now what were the offences of which these instructed persons were convicted? In one respect they may be brought forward appropriately to the subject of this article, since they were not for the most part thefts or larcenies such as ignorant persons might be led to commit, but offences against the State, or embezzlement and fraud. Thus fifteen were political, including one of offering a bribe at an election; one was manslaughter, atoned for by a fine of a hundred pounds; eight were forgeries and offences against the currency; seventeen were embezzlements, frauds and assaults; three were larcenies by servants, and the remaining fifteen simple larcenies. The number of males in England and Wales at that time were between seven and eight millions.\*

Turning from these statistics to military reports, we must remember that from the criminal returns are altogether excluded a certain class of military offences, such as insubordination, neglect of duty, cowardice, habitual drunkenness, and disgraceful indebtedness. On the other hand there are officers who have committed crimes against the law and yet have not been tried or convicted by Courts Martial.

\* Porter's "Progress of the Nation."

Such was the case of an Ensign last year in Bengal, whose name was struck off the strength of the Army on the 22nd January, he having swindled several trades-people, and then contrived to escape the hand of justice.

We will examine the Courts Martial which were held in the Presidencies of Bengal and Bombay during the last year, setting aside as foreign to the question those before which medical officers were tried. The returns of that year, it should be observed, are very favorable, as the number of convictions are below those of many previous years. Take for instance the year and a half when Sir Charles Napier was Commander in Chief of India ; no fewer than fourteen officers of Her Majesty's regiments, and thirty six of the Bengal Army, were then tried; only three of whom were acquitted. Whereas in the year 1854 there were in the two Presidencies but fifteen officers tried by Courts Martial, and only thirteen found guilty. We shall however shew that the Commander in Chief did not approve of the two acquittals, and considered that they were both contrary to the evidence. •

Amongst the convictions of last year we observe as first in respect of time the sad and flagrant cases of five officers in one Regiment charged with intoxication, obscenity, and giving false testimony, of a sixth charged with giving false testimony, and of their commanding officer charged with conniving at habitual debauchery, ribaldry, and indecency. We have then a Lieutenant reprimanded for the venial offence of addressing disrespectful words to his commanding officer ; a Lieutenant and Quarter Master transported for beating a servant to death ; a Lieutenant found guilty in June of fraudulently giving bills of exchange when he had no funds to meet them ; a Lieutenant ordering prisoners to be shot ; a Lieutenant in September writing an offensive and provoking note to a brother officer ; a Lieutenant insulting the Adjutant General of the Queen's Forces in India ; and lastly a Lieutenant making false statements and promises in regard to his pecuniary affairs.

Four of these cases we will separate from the rest. Although the crime of ordering prisoners to be shot in cold blood is under ordinary circumstances most revolting, yet it may have been committed in this instance through a mere error of judgment and nervous anxiety arising from a dangerous posture of affairs in an enemy's country, at all events it has no affinity to the more heinous or debasing crimes mentioned above. Neither have the three cases of insubordination, to one only of which it will be necessary for our purpose that we should direct the reader's attention.

The scene of the transactions which led to this trial was laid in two places ; partly in a cricket ground at Anandale ; partly in the mess

room of Her Majesty's 52nd regiment. In the first scene the Lieutenant, who had made arrangements for selling his commission, is seen preparing to take his part in a game of cricket; but is told by the Adjutant General that he must not play. The rejected one asks afterwards if he is not as much a gentleman as the other, and is informed that he is not; upon which he calls the other "a liar and no gentleman" and offers him satisfaction. "Damn your satisfaction," replies the Adjutant General; "I'll stop your papers;" and this great man further tells the other that in case of his coming there again he will have him turned off by a chuprassie. In the second scene of this same drama we have a brother officer telling tales of the prisoner to the Adjutant General. "In the unguarded freedom and privacy of a bedroom," as the Court express it, between 9 and 12 o'clock at night one officer—in whom wine occupied the place of wit,—told another officer who was living in the same bungalow with him that he should horsewhip the Adjutant General, and more than a fortnight subsequently that other officer actually repeated these words to the person with reference to whom they were spoken. "Upon these facts we need make no comment, but leave others to draw what inferences they please. The Adjutant General, it appears, is addicted to personalities and emphatic language; for in the month of October we find the Bengal newspapers giving publicity to a correspondence in which this high officer admits that he had said to a retired Captain "you are a damned bad umpire," and considers that such language requires no apology.

As regards the other cases we shall for obvious reasons make no special allusion to any one. We must however do Oakfield the justice to admit that in one regiment of the Bombay Army the coarseness, indecency, and blackguardism exceeded all that is represented in that work, that the conduct was such as might have raised a blush even upon the cheek of Cade, and that although we may find fault with the author who has taken an extreme case, or rather brought his illustration of the Army up from the lowest deep, we must yet confess that there was a lower than his lowest, and that by one instance at least all his reflections have been fully justified.

But here let us state how far we consider that the morality of the Army is called into question by these few cases. All that we maintain is, that the society is unhinged where there is a possibility of such occurrences. They are indices of so much and no more. They do not prove an alarming prevalence of vice and dishonesty in the Army, for we know that it contains a fair proportion of honorable, well-principled and intellectual men. But they must satisfy every impartial mind that there is *vis fons malorum* which does not exist within any other body of English gentlemen, and which ought to be

removed from this body. We ask the candid reader whether he believes it possible that such revels as were brought to light before a Court Martial last year, which occurred in a mess room, and which a band of conspirators in vain tried to conceal under a veil of falsehood, could occur amongst a society of barristers, or students at the university, or even boys at a good public-school? In our conscience we believe they could not. Many members, indeed, of schools and universities are of such an age that they cannot be expected to have learnt a full appreciation of the respect due to society, and of those restraints which the worst men are compelled to acknowledge. They frequently burst the bounds of propriety, and getting the bit out of their mouths leave discipline far away behind them. But we are proud to say that in the present age there is a fine sense of honor in our good schools and colleges, a chivalrous respect for woman, a decided recognition of public decency, and that not one of them could be made the arena for such pranks of debauchery and mendacity as those to which we have alluded. There is a leaven of Christianity too, and even where that is absent, of good breeding, so that there is that internal struggle between good and evil which always disturbs large bodies of men residing together, yet decency, honor and truth so much preponderate, that filthiness, meanness and falsehood are fettered and imprisoned in secrecy and silence.

We have now guardedly received Mr. Arnold's testimony respecting the state of the Army, and have admitted the testimony of late Courts Martial; our most important evidence is in reserve. Amongst the illustrious dead there is one who, when living, was sometimes driven by the impetuosity of his temper and excessive self-esteem into acts of indiscretion and insubordination; but who could deny to Sir Charles Napier the possession of soldier-like qualities, honorable feelings, and singular penetration of mental vision? Who can doubt that his love for his profession was ardent, or that his aim was to ennoble it, and make it respected? In short, where can you find a witness more capable of forming, more free in expressing, and more resolute in supporting his opinions on this subject?

By this Commander in Chief we are led to advance our position one step, and point not only to certain cases of indebtedness, gambling, fraud and drunkenness, but also to a strangely marked and ill-timed leniency of Courts Martial. After attentively weighing his remarks, and comparing them with the proceedings which induced him to make them, we cannot fail to trace in such Courts the evidence of a "fellow-feeling," and to determine that, when trying a certain class of offences, their sentiments; if not their language, must surely be "*hanc veniam petimusque damusque vicissim*"; in other

words, our own position is a trying one, and we shew as we hope to be shewn mercy.

The first instance we shall refer to is of an officer who was tried at Lucknow, on the 27th June 1849, for fraudulently taking money out of a note addressed to another officer and giving a receipt with a false signature. The Court found him guilty, but recommended him to mercy, on account of "his extreme youth and inexperience," and because "he may have been unaware of the serious nature of the offence." At this all the old Chief's indignation is roused:—

"What! pardon and turn back among the officers of the Indian Army, a man convicted of felony! On what *grounds* does the majority of this Court cast upon the Commander in Chief the pain of refusing pardon? On the grounds of *youth*! Has he not been nearly a year and a half in the Army? Has he not a commission? Is he not, by the rules of the service, deemed old enough to sit, and has he not sat as an officer in judgment, and as a magistrate to try and punish others? Is he not old enough to be entrusted, and has he not been entrusted with the command of men? With a Subaltern's command in peace and war? and when men's lives and safety depend upon the conduct of a subaltern? Has not that glorious uniform which he has disgraced by two infamous actions, sufficed, by its recognized authority, to introduce him into the best society, even into the presence of the Sovereign? And would the majority of the Court wish me to leave it on the back of such a man as the prisoner? Has he been tempted by misfortune and distress? No! He avows his wealth; he has had the education of a gentleman; his misconduct seems to be the result of innate moral turpitude! Had the prisoner been horror-struck at the enormity of his guilt, avowed his crime, and cast himself, repentant and conscience-smitten, upon the mercy of the Court, I could have understood the feelings of those who recommended him to mercy. But such is not the case. On the contrary, while conscious of his guilt, he deliberately adds to his crime by the effrontery, the sophistry, and the falsehood of his defence! To pardon such an offender would be an insult to the Army, and I will not do it."

In October of the same year we have an officer found guilty of playing at cards for large sums of money, evading payment when he had lost, deliberately making false statements regarding the transaction, and finally calumniating the officer to whom the money was due. A nice character that to remain in an honorable service, very nice; so the Court recommend him to merciful consideration, but happily his Excellency could not discover "just grounds" for such recommendation.

The last mentioned gentleman was, it appears, a mere clumsy

gambler, who attempted to escape the consequences of his folly by equivocation and misrepresentation ; but the next officer tried in March 1850 is evidently a knowing and practised swindler. Having been a shareholder in a rotten Bank, he himself got rid of his own responsibility, induced a friend to purchase shares by misrepresenting the state of the concern, and published a false report of its condition. The Court on this occasion plead with unusual urgency in the prisoner's favor, and "do most earnestly recommend him to the clemency of His Excellency the Commander in Chief" on account of his high character. Upon this the old Lion again springs from his lair. His roar is this time somewhat subdued, his reasoning strong but temperate ; and the following remarks were perhaps on that account the harder of digestion :—

"The Court have convicted the prisoner of falsehood and deceit in his dealings with a brother officer, who seems to have confided in him, yet eleven members of the Court recommend the prisoner to mercy "on the grounds of high character"; such recommendations add much to the pain of those whose duty it is, to inflict punishment, but I must decline complying with the request of those members who concur in this recommendation. When violence of temper, error in judgment, or the thoughtlessness of youth, lead men into culpable conduct, their high character bears great and honourable weight, excusing human frailty. High character is also justly appealed to when concurring circumstances cast suspicion on yet unblemished reputation ; but when the charge is dishonour, and that dishonour proved, former high character vanishes and is nothing !"

The next instance is perhaps the most extraordinary of all. In October 1850 it was proved that an officer had sent what the Commander in Chief styles "a begging letter" to a Serjeant, and had borrowed of him several sums of money, had refused to pay a poor widow the amount justly due to her for house-rent, whilst he was keeping three horses, not one of which was absolutely required by him, and had driven his servants to distress by keeping from them wages for eleven months. Now in what light do the Court view these acts of which they find the prisoner guilty ? On the first charge they merely give their sentence and make no remark ; devouring the widow's house they declare to have been "unbecoming," but except against the word "highly," and pronounce it not "highly unbecoming," as worded in the charge ! As for the servants the Court admit that they were not paid but "attach no guilt to the fact." They merely sentence the prisoner "to be severely reprimanded." Sir Charles Napier's remarks on this sentence are as usual strong, lucid and happily expressed, and he concludes by giving his opinion, that if Government, treating the Court as the prisoner treated his ser-

vants, had kept them "eight months or a year out of their pay, we should hear very different sentiments expressed." Such were cases of fraudulent dealing which Courts Martial treated with marked tenderness.

The next instance is to be placed in the same category with these, only because it reveals extraordinary baseness on the prisoner's part. To a commanding officer of a native regiment had been committed by her father a young lady, the wife of a certain lieutenant, belonging to another regiment. Her generous protector, finding such an opportunity highly favourable, attempted to seduce her. Now observe the view taken of this matter by the Court, who sat in October 1850, and who plead for the prisoner as if they were his paid advocates. They recommend him to mercy on account of "the dangerously trying position in which the prisoner found himself placed by circumstances resulting from one fault, which, however reprehensible, has still not always been considered as subversive of military discipline." How delicately these gentlemen deal with the seducer ! His act was, as Fouchet said, worse than a *crime* ; it was a *fault* ; and it was reprehensible ; yes, he was a naughty man, and really ought not to have given them all this trouble. But his *fault* had not always been considered one which endangered discipline. A few people, who had more virtue than wits, might have supposed that no sort of discipline could be preserved, if commanding officers could seduce subalterns' wives with impunity ; but the Court seems to agree with the majority in questioning such starched ideas. If there were many such Courts perhaps subalterns would like it in time, and, as the serfs of Britany in the olden time, think it an honour to be anticipated by their liege lords. The real offence which the senior had committed in this instance appeared to be in throwing aside all disguise, demanding to see the subaltern's wife, and creating a disturbance at his quarters. The Court admit this, but as the poor man had haplessly fallen in love with another man's wife, and one fault will lead to another, they are disposed to regard the matter favorably. Not so the Commander in Chief who makes use of the few criminatory words which the Court had left in the charges, and writes thus :—

"The Court recommend the prisoner to the favorable consideration of the Commander in Chief, which in plain terms is this ; to restore him to the command of his Regiment after the Court has branded him as '*guilty of conduct unbecoming the character of an officer and a gentleman*' in one instance ; and in another as '*guilty of disgraceful conduct*.' I cannot understand the conduct of the Court, in thus endeavouring to throw upon the Commander in Chief the odium of refusing that, which its own sentence renders

it impossible for him to grant, without insulting the officers of the Bengal Army in general, and those of this regiment in particular ! I must leave the members of the Court to their own reflections on such a proceeding, feeling confident that many must have been adverse to this recommendation."

We wish our readers would refer to these proceedings and make their own reflections. We have no wish but to be impartial, and are not conscious of having perverted or exaggerated any one word or fact.

After the leniency manifested in these cases of swindling, fraud and seduction, we cannot have any surprise left for it where there are only charges of drunkenness and indebtedness. Thus in August 1849 there was an ordinary affair of this kind when a subaltern was tried, and it was proved that he was an habitual and deliberate drunkard. Very irrationally the Court recommend him to mercy, but without stating their grounds. Sir Charles notices this, and forcibly points out his own grounds for not paying further attention to their recommendation. In January 1850, an officer was charged with presiding over a Court of Requests when in a state of intoxication, abusing one of the suitors in obscene terms, and eleven days afterwards being drunk on parade. The Court so far forgot themselves on this occasion as to find the prisoner not guilty on one charge in teeth of the evidence, to assume that another charge had been previously disposed of by competent authority, when in reality it had not, and lastly to pass a sentence which was so mild as to be actually illegal. In consequence the Commander-in-Chief was compelled for once to resort to threats, and to inform them that, if they did not pass a proper sentence upon the criminal, they would themselves be prosecuted for refusing to do their duty. Thus *driven* to reason they admitted their errors, and with the scales of justice forced into their hands retracted their former decisions. Yet when substituting others, they interceded for the prisoner on account of his "high character." We should like to know what is these officers' idea of a *low* character. A man, who, within twelve days, was drunk and pouring forth filth from his lips when sitting in a judicial capacity, and again drunk at a public inspection—such a man comes up to their standard of high character !!

We can discover but one case in which Sir Charles Napier exercised his prerogative of mercy independently of a Court's suggestion, and but two in which he complied with a Court's recommendation. The times were out of joint ; sternness and severity could alone restore them to a healthy working condition. In fifteen months Courts Martial had recommended to mercy seven persons whom



they had convicted of grovelling and substantially vile offences. Of these one was a thief and three were swindlers, according to the admission of their judicial intercessors, who would yet have had them restored to their places in military society. One of three things such extraordinary conduct must prove: either the officers composing these Courts were indifferent as to the character of the society in which they mixed, or their morals and intellects were so dull that they could not perceive when crime had become habitual and ingrained, or lastly they meanly designed that the odium of inflicting punishment should be borne by the Commander in Chief. Here is a trident on one prong of which we maintain they must fall. For our own part we prefer to impale them on the centre one, and suppose them so obtuse as not to perceive that an indiscriminate extension of mercy towards all classes of offenders is a mockery of justice, makes the majesty of law an unmeaning phrase, and saps the very foundations on which society is based.

We wish we could be sure that the caustic remedies applied by Sir Charles Napier to Courts Martial had quite cured them of this mistaken leniency. Unfortunately the experience of last year proved that the evil was not eradicated. In spite of Sir William Gomm's remonstrances, a Court in Bengal insisted upon acquitting a Quarter Master who was charged with peculation in the management of the mess stores; and what was the result? This officer was led to suppose that the law might be defied with impunity, and consequently did not suffer any length of time to elapse before he committed an offence which led to his transportation—a testimony this to the truth, that a too free use of pardon is not merciful, but rather acts as an encouragement and incentive to crime. But as this officer's first trial took place in 1853, we shall say no more of it, although the Gazette of last year contained the confirmation and remarks upon the proceedings. In October of last year a Lieutenant was tried for drunkenness, and declared 'not guilty.' The Commander-in-Chief was satisfied that the evidence required an opposite verdict, but was well pleased to give the prisoner an opportunity of retrieving his character. In May, a Lieutenant was convicted of giving bills of exchange to a creditor when he knew that they would be dishonored. He was found guilty, but the punishment awarded by the Court was so slight that the mild Sir William Gomm administered to them a just rebuke, from which the following is an extract:—

"In awarding this sentence, the Court have declared to the Army their deliberate opinion, that it is a comparatively venial offence in one of their body to draw bills of exchange upon a Bank in which he has no funds and to allow those bills to remain unpaid. His Excellency entirely differs from the Court, and, in publishing these

proceedings, wishes to remind the Army, that the honor of the service to which they belong is mainly in their own keeping."

But Bombay offered a still more glaring proof of the sympathy which Courts Martial have with a certain class of offenders and of their striking inconsistencies. An officer was tried in September on a variety of charges, or as they are styled, instances of charges, but as he was only found guilty in one instance, we will merely notice that. It was to this effect: For highly disgraceful conduct in having broken his word of honor. Now what is the light in which a Conclave of British officers view such an offence? Why (consult the records, reader, if you doubt us) they find him guilty of the charge with the exception of the words "highly disgraceful." They do indeed. They solemnly declare that it is not highly disgraceful for a British officer to break his word of honor. Is there, we ask, any sentence in "Oakfield," in Mrs. Colin Mackenzie's notorious work, or in any lampoon, so damnatory of the Army as that sentence? Why, if there is one thing on which the military profession piques itself more than another it is its delicate sense of honour. It was so in the time of Shakspeare who pleasantly quips soldiers for their too scrupulous sensitiveness on this point, and makes his clown fear to use the word "lie" even in its signification of *lodge*. "I dare not say he lies anywhere," the fellow answers to Desdemona; "He's a soldier, and for me to say a soldier lies is stabbing." Not so a Court Martial; it can contemplate a charge of falsehood with tender regard, and carefully wipe off from it the offensive epithet. Unhappily that hand which once launched forth the thunderbolts of Martial Law with unerring aim is now stiffened in the tomb, or how the Hero of Sinde would have hurled his terrible periods at the heads of the devoted Court! As it was, the Commander-in-Chief demanded a revision of the finding, and then what was the expedient on which these sages hit? Without questioning one fact or commenting upon the evidence which had induced them to find the prisoner *guilty*, they simply declare that he is *not guilty*. So high is their dudgeon, that they blindfold justice and stultify themselves rather than admit that it is highly disgraceful for an officer to break his word; having argued from the evidence that a prisoner is *guilty*, they argue from the same evidence that he is *not guilty*. What are the old stories of ignorant juries as compared with this? They have brought in verdicts of 'more innocent than guilty,' 'guilty but served him right'; and so forth; yet ridiculous as these are, we see in them traces of a latent meaning. Not so in the verdict 'guilty and not guilty.' The Commander-in-Chief's rebuke is deserved, and considering the circumstances of the case, astonishingly mild:—

"This proceeding is quite incomprehensible, as the Court Martial

has assigned no reason for reversing a Finding which must, it is presumed, have been arrived at after mature deliberation, and which is substantiated by the clearest evidence.

"Such conduct on the part of the Court is lamentable in the extreme ; it throws discredit on the proceedings, and is opposed to every principle of justice."

Reverting to the reign of Sir Charles Napier we find that the other Courts Martial during that period were occupied with charges of drunkenness, gambling, and its consequences—disgraceful indebtedness accompanied by dishonorable evasion. In confirming a Finding, His Excellency makes an earnest appeal for aid in suppressing these vices, and writes thus :—"It is impossible for me not to call upon all who have common sense, resolution and respect for their uniform, to join in the endeavour which I am making to repress those destructive vices which are so unfortunately prevalent in the European portion of the armies in India—*drunkenness and gambling*." This may be regarded as the thesis on which his Farewell Order is an enlarged treatise. We wish that we could print that celebrated document entire, and although it is well known, we must give a sketch of its contents. The aged Chief begins by calling upon all officers to exert themselves in putting a check upon the system of debt which is so discreditable to their profession, and affirms that his time has been taken up with the examination of weekly, if not daily complaints against officers for non-payment of debts. Considering the magnitude of the Army, the number of officers who have misconducted themselves is not inordinate, but yet so large as to demand repression with a strong hand. Officers should feel shame at being brought before a Court of Requests, and thus being associated in the eyes of the public with cheats and infamous persons. But in thus calling upon them to avoid pecuniary responsibilities it is fair that the question, whether an Ensign can live on his pay, should be first determined. Sir Charles Napier knew from experience that he can. Not of course that he can do it without self-denial ; but why should he not exercise self-denial ? The proof that an Ensign *can* live on his pay is the fact that many *do*, and even remit money to their families. Why, proceeds Sir Charles, should an officer expect to get on without that pains-taking and economy which are requisite at an initiation into other professions ? Others begin life with scarcely sufficient to keep them in food and clothing ; these foolishly try to live as if they were monied gentlemen. To shew how frequent cases of debt are, it is stated that on a single day, fifty-three cases, in all of which subalterns were concerned, were brought before a Court of Requests. A Brigadier writes thus :—"Another Officer I know enjoys Champagne Tiffins, leaving his servants to drag him before the

Court for their just claims. How humiliating for those connected with and proud of the profession !” To prove that these matters are not exaggerated, such facts might be published “as would shock every honest and honorable man.” One Commanding Officer writes thus, “I can confidently assert, that the numerous cases brought monthly before the Courts of Requests are a disgrace to the Army we belong to.” The causes of this disgraceful condition are then analyzed. The first is, that some officers have had a defective education, “or perhaps a vulgar one, which is worse.” The man who “*enjoys a Champagne Tiffin, AND SWINDLES HIS SERVANTS,*” is a vulgar knave, and has not learnt that honesty is inseparable from the character of a gentleman. The second cause is youth and inexperience, which ought to be protected by the vigilance of Commanding Officers, and every lad should “at once learn that to drink unpaid-for champagne, unpaid-for beer, and to ride unpaid-for horses, is to be a cheat, and not a gentleman.” The third cause is the constant marching of regiments, which should be avoided, as much as possible, in times of peace. The fourth cause is the extravagance of messes, in which poor and prudent officers are frequently crushed by a majority. The fifth cause is the Banks which offer such facilities for borrowing money, “encouraging those vices which are the most mischievous, especially racing, a vice always accompanied by gambling and extravagance.” The glorious old man concludes thus—“I can only offer my advice as I quit the scene. To-day, I am Commander-in-Chief ; a week hence, I shall be no more to the armies of India than a private gentleman. But the armies of India must ever be much and dear to me ! For nine years my whole energies, such as they are, have been devoted to the honor and glory of the Company's troops. I may say that I have become as much identified with the armies of the three Presidencies as if I had risen from their ranks : I have jealously guarded their honor, and I have fought at their head ! I now leave them for ever : but in the retirement of private life, although no longer able to serve them, the destinies of the Indian armies will ever occupy my thoughts. I here take leave of them hoping that this order will be of use as the last which I can issue to the armies of India.

(Signed) C. J. NAPIER,

General Commander-in-Chief.

Head Quarters, Camp Ferozepore, 9th December 1850.”

Brave earnest soul ! Such is your legacy to the Army of India. May your legatees shew that the treasure has not been bestowed upon them in vain. If these burning words kindle in us an honorable

ambition to rise above all meanness and debasing vice, they will be more than all the wealth hid by genii beneath the Forty Pillars. They are pearls and diamonds dropped by such a man as Horace justly esteemed more than an Emperor—because, whilst just and tenacious of his purpose, his solid mind was unmoved by the threats of a multitude, he cared for the opposition of neither man nor devil, and might indeed have stood a stranger to fear amidst the ruins of a universe.

A question which deserves some slight consideration is this : How far is the character of the Army affected by these vices of individual officers ? Although a few spots and freckles do not prove that the whole body is diseased, yet a certain extent of surface disfigurement does lead to a suspicion that there is some organic and deep-seated malady. Now without inquiring into the system of indebtedness, which must certainly be injurious to the tone of any society, we may content ourselves with examining what is broadly displayed before our eyes. The sympathetic leniency of Courts Martial is not to be denied ; but the amount of actual crime appears to be great when compared with the English statistics which we before exhibited. Only fifty-nine educated males out of seven or eight millions were found convicted of penal offences. Compare these numbers with those of the Indian Army. The number of Company's officers in Bengal is less than 2700 ; of Her Majesty's officers less than a thousand. In Bombay there may be 950 Company's and 280 Queen's officers. In fact the number of officers in the Presidencies of Bengal and Bombay is considerably under five thousand ; a large portion of whom are always on furlough. During the eighteen months Sir Charles Napier commanded the armies of India, forty-seven officers, or at the rate of thirty-two in one year, were convicted of military offences in Bengal alone, when there could not have been more than a total of 3,400 actually resident, so that nearly one in every hundred was thus disgraced. Last year, however, affords a very favorable contrast, inasmuch as only fourteen in the whole five thousand were found guilty by Courts Martial, or say one in three hundred and sixty. Still we have the startlingly antithetical fact that only one educated male out of 127,000 males was convicted in the criminal courts of England. And it must be remembered, of the fourteen Indian cases one was of aggravated manslaughter, one of deliberate fraud, and six of the equivalent to perjury, for they were cases of false testimony uttered before a court of justice. These eight if committed by civilians would have been tried by the criminal law of England.

One more question only shall now detain us : Are the morals of the Army in India inferior to those of the Army in England ?

On this point there is a variety of opinions, and having had an opportunity of hearing them expressed by persons the best capable of judging, we have arrived at the conclusion that the Indian Army is not inferior. In each country an officer has certain advantages and certain temptations peculiar to his situation. An absence of proper incentives to exertion is a just complaint of officers in England, but not in India; a want of good society distinct from their own class, and a certain demoralizing influence of the climate, are drawbacks to the improvement of officers in India, but not in England. A thoughtful and well-informed writer of "a glance at the British Army and its officers" in a military magazine rebukes a Quarterly Reviewer for sneering at officers in England because they are "poor in intellect and morals." The military champion admits the fact, but argues that it is a consequence of their having no encouragement to exert themselves. Jealous of the privileged guardsmen, and lamenting the insufficient pay of officers in the line, he burns with indignation, pours out the grievances of his order in a flood of rhetoric, and exhibits their condition and opportunities in such striking contrast to those of their more favored brethren-in-arms of this country, who have all the incentives of political, revenue, and staff appointments, that we are tempted to give his conclusion, although the extract is rather long :

"It is this hopeless condition that makes men poor in intellect, poor in morals. Impress them on all occasions with the idea that they are inferior to others, and act upon that doctrine, they will come to believe it, and act upon it also. 'Hope deferred maketh the heart sick,' blasts imagination, quenches fancy, dries up the sources of, and the inducements to, rational and philosophical inquiry, and makes a man listless, stupid, selfish, regardless of the future, and willing to forget the past. What 'richness of compassionate sympathy, what clarity, benevolence, or generosity, can be looked for in a man, whose whole life is a struggle to meet his tailors' bills, and to pay his messman weekly. How much liberality can be expected from him, who sees the tenth part of his small income go to increase the credit side of the ministers' budget, to pay for music for which he cares not, or for plate which laughs in his face as he eats off it? . . . His intellect must be poor, cramped, spiritless. He has been bound down, without hope or expectation of anything better, to the constant contemplation of knapsacks, brasses, and polished gunstocks for twenty or thirty years : he has lived in an atmosphere of pipeclay, heard nothing but *shop* talked of, and been waited upon by soldiers since he entered the service. Above all, he has been taught to look upon certain branches of the service as superior to his own, because they receive the rewards, while he does the work,

and with true eastern fatalism, he succumbs to necessity and abandons all idea of improvement, all hope of amelioration. How can his mind expand? His day is cut up by drills, parades, courts martial, signing states, and inspecting ledgers. His whole ingenuity is to make ends meet: for this he eschews Adam Smith, and addicts himself to Cocker. He is a stranger to politics, literature, the fine arts, perhaps to religion. Let those therefore who speak contemptuously of officers, learn to attribute results to their proper causes; above all, let those who are in high places, and have talents committed to their keeping for which they will one day assuredly give account, be careful to do justice to all men. Let candidates for commissions be required to pass examinations, such as may be expected from gentlemen of their age, who have received a liberal education; let a fair and certain prospect of promotion not depending on chance, be held out to all; let those who, notwithstanding this measure, may still be unfortunate, have some regard shewn to their years, and long colonial service, receiving brevet rewards, or other remuneration; let all unfair and invidious distinctions of castes, classes, and corps, be abolished; or if corps are to be favoured, let it be for services and merit, not for idling; let the morals of officers be raised to a higher level by the hope of rewards and promotions; let them not be pinched, screwed, and ground down with taxes, contributions and subscriptions, for the whims and fancies of others; let them be dressed in a style becoming their rank, in character with the gallant profession they have adopted, and with a view to the effect which appearance has on men in general, without perpetual interference on the part of tailors of high and low degree; and let those who make particular branches of science or literature their study, be appointed, according to merit and usefulness, to the military and to some of the numerous civil offices in the gift of the crown; then will they become vigorous in intellect, respectable in morals, cheerful in appearance, useful to society, interested in the well-being of those committed to their care, and grateful to the Sovereign who approves, the country which sanctions, and the Minister who will have the boldness to introduce the first salutary measure for a long-neglected, but important class of public servants."

The only defect which appears to us in Sir Charles Napier's farewell address is, that he does not say how far the future remedies are to be applied for a complaint with the diagnosis of which he is thoroughly acquainted. He explains the alarming symptoms of champagne-tifins, swindled servants, extravagant messes and abounding Courts of Requests; he goes further, and shews how the seeds of the malady are sown, how the infection is first taken, and how it has gradually become endemic; but there he stops. Perhaps he thought

like the Roman poet that a man is sufficiently happy if he has been able to investigate the causes of things; indeed in so doing Sir Charles pointed out the seat of the disease, and thus left us to conclude how it is to be eradicated.

The extravagance of messes has, time out of mind, been a subject of honest regret. We will not enter into the vexed question whether any mess at all is required. If well managed it may be a useful means of preserving the social status for aught we know to the contrary; but sure we are that as messes are at present, the Army would not suffer, if one and all were suppressed. We are not alluding now to any outrageous behaviour or the costly profusion of a few, but we maintain that the plainest and simplest of them are too extravagantly provided. Cleanliness, neatness, and comfort are alone required. These, perhaps, should be more studied than they are; but all purchase of superfluous plate, luxury and prolonged potations should be prohibited. How is it that whenever men are congregated together, except in the Army, their ordinary meals are distinguished for simplicity? Attend the Hall at one of the Inns of Law, or dine at the Undergraduates' table in a College Hall at an English University, you will there see the scions of high-born and wealthy families contented with such wholesome fare, served on ordinary dishes as a body of officers would turn away from with contempt. As for creaming champagne, sparkling hock, moselle and curaçoa, the introduction of them would bring the fulminations of the Lord Chancellor down upon the delinquent Inn, or call for a new Parliamentary Commission to begin *de novo* the work of University reform. The late Commander in Chief of the Bombay Army, who, with unquenchable zeal and the true spirit of a soldier, did more for that Army than the very best of his predecessors, checked as much as he could the gigantic evil of extravagance by issuing stringent regulations for the management of messes. He justly remarked that an officer's usefulness depends as much on his moral as military training; proceeded to shew that the rules and decorum of society must be strictly preserved at the common tables of officers; deprecated unnecessary expense; recommended that only sherry, madeira and moderately priced claret should be provided, but unfortunately did not positively prohibit wines of a more costly description. "The neatness and comfort of a well regulated private table," he declared to be the proper standard, and not "the display and profusion of a public entertainment." Yes, when they hear the pops of the leaping corks, or are dazzled by the brilliant plate and glass of their dinner services, nine out of ten young officers may well turn their thoughts to their fathers' table, with its Staffordshire ware, think of the mutton and port and sherry which are enjoyed in their family circle at home,



and ask themselves whether it is now absolutely necessary for a British officer to ruin himself by pampering guests, or vitiate his liver by faring sumptuously every day. 'They would be discontented, and the mess would be deserted, if they had not some display and luxury there,' we are told. But attendance at the mess is professedly compulsory; why should it not be really so as at the Universities? Then if foolish men choose to indulge their lavish propensities in their own homes, and make their dinner in the mess-room a mere form, their folly is at least committed not *by* but *against* authority, and the economical habits of their wiser comrades have the sanction which is so much needed.

All persons who have turned intelligent minds to such subjects know that extravagance and debt are the ivy and the damp which, if they do not ruin, at least impair the structure of society. They displace one stone, loosen another, make great rents, until the whole building is injured. These two vices are antagonistic to the nobler qualities of man. Such as indulge them suppose that they are the offspring of generosity and liberality; but if so, they are certainly guilty of patricide and matricide, for they first destroy the capacity to exercise those qualities and then the qualities themselves. Talk to a spendthrift about cheering a home of want and misery, supporting an aged father, or showing kindness to his relatives—it will be well, if, instead of benefitting any, he does not introduce misery into the homes of tradesmen, forfeit his securities and thus let a brother officer languish in prison, meanly ask his relatives for pecuniary assistance, and defraud his servants of their paltry pittances. That man, you see, may have once been a fine, free, open-hearted fellow; but he is now reduced to degrading shifts; he will drive very hard bargains, sell you a horse and 'do you in the eye,' as he says, conceal his play at billiards and 'clean out' a griffin, then smile and speak glozing words to contemptible money-lenders. How many are thus falling every day into meanness and dishonesty! It is impossible that the character of any society can be high where there are gaming, horse-racing, luxury, and abundant facilities of contracting debts.

Now when this truth is so obvious what is the cause to which a few military men trace repeated acts of baseness? The following is the opinion of a military writer, in England, who has evidently had the advantage of experience:—

"We are not fire-eaters nor practised duellists, and we abhor those who are; yet we at times regret that the duel has been forbidden in the Army. All the old officers of the Service will agree with us, that the tone of manners in many of the regiments of the Army is not in unison with the improvements introduced into the

constitution and education of the military body at large. . . . . The very effective system of duelling, with all its faults, had this merit, that it restrained bad manners, and alike contributed to prevent the giving or taking insults with impunity\*."

So because there are not enough officers killed in their country's wars, we must restore the *duorum bellum* or *duellum*, and let them do for one another what the Russians have left undone. Happily such arguments are so out of date that they do not now need a refutation; but we must declare, in opposition to their maintainers, that the morals of the Army are not lower than they were, and that they have improved, although not, as we stated, in a ratio correspondent with that of general society. He proceeds thus:—

"The recent Courts Martial in the 46th Regiment never could have occurred had the system of our early days been in force. The first attempts at annoyance would then have been instantly checked by the demand for satisfaction, and the young Ensign would have been secured from future insult. The manners of the junior members have, in some corps, most assuredly deteriorated from what we once knew them to be. Indeed, those officers who remember the courtesy of regimental life in their young days, can hardly now credit, as they read, the disgusting and degrading practices brought to light, by the proceedings of the Courts Martial in the 46th Foot."

To us it seems the height of absurdity to suppose that such a mawkish, unreal, dilettanti system as that of modern duelling could stay the progress of corruption in any society. In fact we believe, that the present institutions of society and regulations of the Army will answer all ethical purposes, provided they are acted up to in spirit. We have been much struck with the Queen's Regulations in one respect: they are inspired by a love of kind, and call for a genial sympathy between military classes. It is well known that wherever these are wanting and there is an *infidos agitans discordia fratres*, there is a corresponding deterioration of tone in a regiment. Of commanding and senior officers we do not presume to speak, but we wish that the following words which appear under the head of 'Interior Economy of a Regiment,' were more kept in mind: "The timely interference of the Officer, his personal intercourse and acquaintance with his men, which are sure to be repaid by the soldier's confidence and attachment, and above all his personal example, are the most efficacious means of preventing military offences." Not a doubt of it—the efficacious means of preventing offences not only amongst men, but also amongst officers. Everywhere the higher classes may be humanized by taking a friendly

\* & Naval and Military Gazette," 12th August 1854.

interest in their inferiors. And this suggests a want which is a plague spot of European society in India. Hundreds of kind, loving hearts are weary of only doing good in their elevated sphere; they long to let their sunny influences light upon those beneath them and make them sunny too. In the towns, and more in the country of England, lordly men and women carry comfort and encouragement to the homes of peasants and mechanics. It is not so here; we not only have a 'plurality of worlds', but between these worlds is impassable space. People live for and love those who can recompense them; and such love is cold, calculating, unenergizing. Does an officer of Europeans speak to his men except on parade, when engaged in orderly duty, or perhaps when giving starched advice to a defaulter? Possibly one or two officers in one or two regiments may visit the Hospital and speak kindly to their suffering men, watch over the school, encourage the master, acquaint themselves with the youngsters' names and characters so as to gain their affectionate respect; there may be regiments the ladies of which let their own compassionate virtue shed its cheering light in the patcheries, and try to dispel the moral darkness which hangs about them. But these are not the ways of gentlemen and ladies attached to the Army. Meet them forsooth in their own houses or in the society of their equals, and they may be kind, genial, and generous; but poverty or inferiority of rank shuts them up. In such a case, when not money, but gentle words, melting pity, the warmth of fellow-feeling are required of them, very many are hard, selfish, boweless. We say not this to blame individuals who are cramped and confined by a hateful system, the barriers of which only a lion-hearted man can burst, but we ask, whether that system can ennoble such as it enslaves? Every one who manifests genuine kindness to his inferiors is the better for it. We are sure for instance, the world is sure, that Miss Nightingale is a noble-minded lady. The love of her kind has drawn her from her father's mansion, the society of her equals, and the luxuries of her situation to the foul atmosphere of hospitals, the companionship of the uneducated and the harrassing anxieties of a nurse. And because she has thus heroically debased herself, and for that single reason, the world acknowledges her to be a noble-minded woman; all are confident that she is above petty actions and that she could not perpetrate anything really base. So inseparable is true condescension from true dignity of character; so universal is the feeling, if not the confession, that that of which there is a total absence in both the civil and military communities of India elevates and ennobles humanity.

The great drawback, however, to military life in time of peace is the want not only of something to do, but of something to work out.

Wherever men are gregarious, except in the Army, the majority are fulfilling a purpose. How petrifying is regimental life at a military station in India! A parade, and an oppressive dinner party, are the calls of duty; a ball and a hog hunt, the occasional variations of pleasure. For what are men living there? To be Brigadiers, if their livers will hold out. In the meanwhile the hopes and aspirations which few youths are without are dissipated in the dreary atmosphere of a cantonment. Desire of distinction burns itself out, and laudable ambition slumbers until it falls into the sleep of death. And yet the words of a great but eccentric mind are true:—"To do noble and true things, and vindicate himself under God's heaven as a God made man, that the poorest son of Adam dimly longs. Shew him the way of doing that, the dulllest day drudge kindles into a hero. Kindle the inner genial life of him, you have a flame that burns up all lower considerations." Hence close observers have remarked what different men officers become in a campaign. They are then united in pursuing an object which is distinctly before them. The lassitude, into which undefined desires once subsided, is at an end. They become earnest and mutually interested in each other. Wild passions are then, it is true, too often excited, and sometimes appalling crimes are committed; but on the other hand generous impulses agitate hearts which were supposed to be only sordid, and icy selfishness is melted into tender moods. Men are labouring right seriously, and are often compelled to reflect and act for themselves. Thus does war strike many lights, so that minds which were never suspected of being the least inflammable blaze into moral life and intellectual vigour.

And these considerations point out the main reason why candidates for commissions and cadetships should be examined as to their literary proficiency. It is not that any high qualifications are required; but it should be known whether a lad's mental powers have been so far exercised, that he will be conscious of their existence, and desire still to employ them instead of leading the life of a barbarian. Some literary test is the only security that our military stations will be, not gardens for raising 'man-vegetables,' but the lodging places of pilgrims manfully, thoughtfully, faithfully, yet, cheerfully wending their way to eternity. The question, whether gentlemen can be happy and good without education, has been long ago decided in the negative, and may not now be discussed. An individual, a country squire or a 'man about town' may possibly remain ignorant and harmless; but associations of men cannot. When such are not upheaved together with the strata or ranks of society to which they belong, their intellectual is assuredly followed by their moral degradation. Bands of ignorant men live in a valley; they

are even looked down upon by their inferiors in rank or birth, as from a lofty station, till they gradually recede further and at last irrevocably glide down the smooth descent of Avernus.

If indeed there were to be an awakening of the religious life, all the grand impediments in the way of honor and morality would be soon removed. Men, who as the old Round-heads would have said, have the root of the matter in them, may branch out into queer sects and run into strange vagaries; but they could not open letters and steal money, fraudulently prop up rotten Banks, combine to tell untruths, and give false bills of exchange; no, nor could they solemnly award certificates of 'high character' to those who do such things; but rather on discovering them they would feel that the plague had begun among them, that therefore stringent regulations and severe remedies could alone be efficacious. The only way of checking vice is to regard it as a sin. When this is done in the upper ranks of the Army, the feeling will extend itself to the lower ranks. But for this there must be inspiration; the Great Spirit must pass into dreaming, lolling, vanity hunting, self-indulgent, cunning and mean men, and make them genuine and wise and noble. Let however the good and true men of the Army (and their name is yet Legion) feel that they must help in the work: that they must not be afraid to express their opinions or take up arms in honor's cause; nor must they be deterred by any absurd *esprit du corps*, as it is fondly called, from looking at facts when set nakedly before them. Supreme authority is the Archimedes, but such men are the lever, and when a standing place has been found for them, they can lift up to morality a social world.

## ART. III. RAILWAYS IN WESTERN INDIA.

*Minute by the Most Noble the Governor General, dated the 20th April 1853, on Railways in India, printed by order of the House Commons, 19th July 1853.*

IN the year 1850, when the first practical steps were taken for the construction of a Railway in Western India, the people of this country, for whose benefit the finest system of communication was then being inaugurated, had no faith in its advent. It was true, that for several years Railways had become a common theme in India, that much had been written of them, and their wonders proclaimed to the native community by those whose position lent authority to their statements. A clever and popular advocate (the late John Chapman) had long labored here in that new, and to so many incomprehensible, cause. Two Engineers had devoted their professional skill and energy to the task of exploring the rugged Ghauts, and to surveys and other field operations through districts where the Sirkar had never before been known to search for roads. A committee had been formed—reports printed—the indispensable agency of red tape abundantly employed—Government resolutions framed—and even the Hon'ble Court of Directors were publicly known to have bent their deliberative minds upon the subject of Indian Railways. But all these had hitherto produced no practical result. The "airy nothing" which haunted the native imagination, yet had no "local habitation," and the people were sceptics still.

It was in truth no light demand that was made on their credulity when they were asked to believe in a locomotive system, by which they were to travel at amazing speed with unprecedented comfort and economy, and by which their commerce was to be extended and carried on with extraordinary facilities and despatch. Nor was it any common claim upon their confidence to solicit them to embark their wealth in an enterprise, which was to be instituted at a cost far exceeding all that the previous civil undertakings of the local Government had presented to the public.

The scepticism that was manifested by the natives, although no doubt attributable in some measure to prejudice and ignorance, rested principally upon reasonable misgivings. What claim had we upon their faith? There was no analogy in existing circumstances to justify to their minds the probability of the wonders, which had been announced, being ever realised. Could they believe that a new

kind of inland communication, of almost fabulous efficiency and of marvellous costliness, would be provided for them by a Government that had been so careless of the public welfare as to have neglected to provide an ample and unfailing supply of water, or an efficient system of drainage for the metropolis, and to have tolerated famine in the midst of plenty for want of the commonest communications? It was notorious that they had for years left part of the Bombay and Agra Road, the main channel of commerce between Central India and the Port of Bombay, in a state fraught with danger and obstruction. Extensive and productive districts had, as the Natives well knew, long been suffered to waste their abundant riches in remote and inaccessible granaries, for want of roads, the construction of which called for no great efforts, and needed only a small outlay from the public funds. There had been much talk too of a new and superior description of light, fitted both for public and domestic purposes, but the flame of gas had never glared upon their expectant gaze; and in only one of the public thoroughfares was to be seen, here and there, a pale and ineffectual fire, just making darkness visible. What evidence of the bonâ fide character of the new scheme was there in the fact, that a project for water-works, which had for years been under the too patient incubation of the Government, remained unhatched; and that, in the capital of this Presidency drought was still an impending curse over its half million inhabitants?

Was it to be supposed by the Natives that a crore of rupees would be expended in a single new road, while in the Metropolis and amidst their own dwellings they experienced the pernicious effects of uncleanness, because the rule of the most civilized nation in the world had, by means of patch-work and dribblets of expenditure, dallied for years with the first essential to the health and welfare of its citizens? What though steamboats had been running here for some time past!—there was little in the slow packets of the Indian Navy, or even in the faster vessels of the Peninsular and Oriental Company, to induce the natives to believe in the introduction of a system of inland communication, which was declared to be capable of safely conveying them at the rate of 50 miles an hour! How could they comprehend that the powerful locomotive Engine would be substituted at enormous expense for the hard-faring pack-bullock, the rude cart and the bamboo coolie, when they remarked an almost instinctive dread of employing machinery except in the principal establishments of the Presidency?

After the late parliamentary debates and popular movements in the cause of Indian reform, there can be no doubt that local improvements, particularly in public works, were placed upon the orders of

the day of the new Governors, both of this Presidency and of Madras. There is in our public works alone fame enough to gratify the ambition of successive Governors, and abundant reputation for a whole *posse comitatus* of professional men. That Lord Elphinstone will do much to mitigate existing evils we firmly believe, for the practical intentions which his Lordship has already manifested, and the promptitude with which some of them have been put in execution, would render it an act of injustice to withhold our confidence from his administration. No prodigies, however, have yet been done, and we sing no peans. We calmly congratulate Bombay on having really moved forward, after all the culpable delay and pusillanimous hesitation *in limine*, and would fain hope that events will ultimately show, that among ourselves as elsewhere "*ce n'est que le premier pas, qui coûte.*"

Only fifteen months have elapsed since Lord Elphinstone came amongst us, and it is with satisfaction we record how speedily his personal exertions have been followed by the sanction of the Hon'ble Court for carrying out the Vehar Water Project, and for the construction of Railways from Callian to Poonah, and from Callian to Ahmedabad. Measures for abolishing the Road and Tank Department, and increasing the extent and efficiency of the Government Engineering Staff for Public Works, have been devised and put in train for execution, and from official intelligence recently published, we gather that the Governor's visit to the Malsej Ghaut is likely to lead to the early construction of one of the most useful roads that could be projected in this part of the country. Scientific expedients for the improvement of the town sewerage have been experimented upon and are being carried into effect. We cannot at present speak without reserve of their probable efficacy; but their adoption evinces an earnest desire to promote the public good, and let us therefore hope that the expected advantages may be realised.

When our Railway was commenced, these steps were still only in the region of probabilities, and it surely therefore was no wonder that the inhabitants of Bombay were then doubtful as to the realisation of that wonderful project! In the fashionable parlance of the day their scepticism was spoken of as the "apathy of the natives," but the fact is, we took not only their experience but their confidence by storm.

The system by which the railways in Western India should be constructed, formed one of the preliminary subjects of consideration, and was duly discussed by those authorities whose responsibility could be affected by it. Fresh from the field of English practice, and convinced of the economical advantages and practical efficiency of the Contract system, the Railway Company's Engineer advocated its immediate and unqualified adoption, and with the evidence



before us, of what has been effected by its instrumentality, we cannot hesitate to endorse his opinion. Apart, however, from practical proofs, there are many grounds upon which it would seem to stand to reason, that by no other means could the great public works of India be carried out with so much despatch, and equal economy ; or its resources, both in labor and materials, be so rapidly and so effectually brought to bear upon their construction.

In the first place the Contract system should secure economy by the force of public competition, an advantage which would be entirely lost, if the plan of constructing the line under the superintendence of their Engineering staff only were adopted by the Railway Company. An eligible Contractor should possess all the requisites in money, materials, and an organised staff of agents ; for with those available resources he would be enabled to make arrangements upon a comprehensive and efficient scale. He would set Locomotives to work as soon as they were needed, erect stationary engines, adopt such mechanical appliances as would either economise labor, or facilitate his operations ; he would build capacious and well fitted workshops. If brick and stone were to be used, he would not depend entirely upon the caprice of the market, but would ensure a sufficient supply by opening brick-fields and quarries, and thereby avoid the delay that usually arises when large quantities of such materials have to be purchased in the ordinary manner. Without the assistance of Contractors, the Railway Company would have the manifold disadvantages of contending with those obstinate monopolies in all branches of local trade, which the ready combination of native tradesmen enables them to create, whenever any extraordinary demand is thrown upon the markets. And here it may be worth while to mention, that in one portion of the railway business which obliged the Company to purchase timber largely in the Bombay Bazaar, they were met by such a combination, and that it was only defeated when the Government gave them access to their depots. This occurred twice during the operations alluded to, and in both instances with precisely similar results. When timber was not procurable from Government, there was no competition in the Bazaar, but directly an independent supply was opened the market prices fell, and each dealer was willing to make his own separate bargain. Another effect of the general practice of what is called in India the Departmental System would be, that a Railway Company would have to purchase all the temporary materials that are needed for the execution of the works, and these, it must be remembered, would not in their case be stock-in-trade, as in that of a contractor, but on the completion of the line would be either so much sunk capital in a deteriorating and unproductive property, or would involve a heavy dead loss.

A large body of agents and subordinate officers of various classes, similar to a Contractor's establishment, would have to be collected and organised; even then, what command would the Engineers possess over the resources of the country in labour and materials? Suppose a European Engineer were sent a hundred miles into the jungle to construct with the utmost despatch 10 or 20 miles of Railway, requiring vast quantities of all kinds of materials and some thousands of labourers. How would he, with his multifarious duties, be able to set about procuring them? Is it not manifest that he would have to contend with much greater disadvantages than a Contractor whose command of such resources had long been one of the essentials of his business, who had acquired great experience in trading in both matters, and had a direct pecuniary interest in his transactions?

Better security for the proper execution of the works would also attend the Contract system, in consequence of the large deposits which the Contractor should be obliged to leave in the hands of the Railway Company, and by which ample indemnification would be provided for all defective works or unauthorised delay; but if the plan which is usually adopted by the Government Engineering Department were followed, the Company would possess no remedy for the loss and inconvenience occasioned by such causes. Their officers would never submit to a penalty, and, if they were dismissed for incompetency or neglect, their situations would have to be supplied by new appointments from England; and what in that event would compensate the Railway Company for the expense and delay of the substitution? It would be unreasonable to suppose that Civil Engineers would not be as capable of discharging the duties required of them by the Departmental System, as any other professional men in this country; but then a great sacrifice of efficiency would be incurred by transferring their practice from a system in which they had been educated, to one to which they would have to adapt their experience. The detailed management and inspection of a district of Railway works are of themselves as much as an Engineer ought to undertake; to throw upon him the additional burden of their execution, and all the elaborate accounts and voluminous correspondence connected with them, would be to abandon that economical subdivision of labor and responsibility from which we believe the Contract system derives its acknowledged efficiency and despatch.

It would also, we think, be a great advantage for a Company to be in a position to deal with a responsible party, acting under their own professional superintendence, and upon specific legal conditions, to whom all orders could be directed; whose experience would fully qualify him to undertake large operations; whose agents were good

practical men in a well organised staff, and whose pecuniary liabilities and personal securities would be bound up with the expeditious and workmanlike method of his proceeding; while under the Departmental system an intricate and laborious official routine would be indispensable, and the advantage of ensuring by a stringent contract the completion of the Railway within a specified time, would be lost. In the event of such unforeseen contingencies, as generally attend the construction of extensive railway works, and so frequently entail upon them formidable expenses, the experience not only of himself but of his agents, as well as his stake in the risks, would lead a Contractor to adopt those prompt and often costly precautions by which alone great ultimate loss could be obviated, but it would be difficult to conceive how such similar cases could be dealt with by a Company at a distance from head quarters, without throwing upon its subordinate officers a greater degree of responsibility than could be prudently left in their hands. If the Contractor, as should always be the case, were bound to maintain his works for a special period after completion, he would possess a direct and powerful inducement to be careful, that they were executed in a durable and substantial manner; but we are aware of no arrangement under the Departmental system, by which the same security for the excellence of the works could be conveniently and effectually provided.

We have been induced to enter thus fully into a consideration of the respective merits of both systems, because there unfortunately exists in India a tendency to abnegate the experience of more progressive countries, upon the cramped and conventional ground, that local peculiarities render its application here inappropriate and undesirable. For our own part, we should be content to decide the question by experience alone, and should be quite willing to recognise that course which has been generally pursued in France and England, as the most efficient and advantageous for the construction of Indian Railways. A more matured régime than that of the French Department of the *Ponts-et-Chaussées*, or a more able and scientific body of men than the Engineers who compose it, are perhaps no where to be found; yet it has not been deemed expedient to apply the Government system to railway construction in that country; while in England, contracts have been universal, except in a few solitary instances, the failure of which might be cited in confirmation of the merits of the system we advocate.

On the other hand we find that the Presidency of Madras has adopted a different plan. The experiment is still incomplete. It is being tried upon a line of country which presents such remarkable facilities, as to afford barely any opportunity for the manifestation of its defects; and even should the sequel seem to

establish the advantages of the plan, it must not be forgotten, that there will be no evidence to show, that still more beneficial results might not have been obtained, if the *modus operandi* had been in accordance with the dictates of experience. It may be that in the wilds of Central India, where no Contractor will venture on the enterprise, the practice of the Departmental System will prove the only method by which a Railway can be constructed ; if so, let it there prevail, for it will then become what, in worth, it really is, a *pis aller*.

Upon its intrinsic merits, then, we do not hesitate to say that the adoption of the Contract system by the Great Indian Peninsula Railway Company was a wise and beneficial measure, and one of its earliest results was the refutation of the assumption, that practical men fresh from England, whatever their previous experience might have been, would be seriously embarrassed in their operations in this country for want of local knowledge. Such, however, was the position of the two English firms of Contractors who undertook the construction of the first portions of the line, that, very soon after their arrival in Bombay, they were enabled to command more local resources than have perhaps ever been simultaneously brought to bear upon any single work in this Presidency. The secret of their success consisted in their being thorough men of business, and in full possession of those sterling practical rules which are current coin all over the world ; in their having a definite purpose, of which the outward and visible signs were apparent to native observers in the resolute measures they were taking, and the demands they were throwing upon the markets, and in that omnipotent agent, cash-payment for their labour and their purchases. It must not be supposed that they accomplished their undertakings without the needful agency of Native assistance, for it was one of the chief elements of their success, that they were able at an early date to rally around them natives of all classes and denominations, whose co-operation was essential.

While this misconception was entertained by many of our local authorities, there was in the early stages of the Railway Company's proceedings, on the part of those whose experience was exclusively European, a corresponding distrust of the competency of Native contractors to execute the special works of which a Railway is constituted ; but increasing confidence having ere long induced the Railway Company to test their capabilities by experiment, and to let a portion of their line to a Parsee, the result proved eminently favorable. And here it may be interesting to draw attention to the analogy, that the elements of the Native's success consisted in his being able to command that European co-operation which was as necessary to him in the execution of his works, as

Native assistance had already proved to be to the English Contractors who had preceded him.

There was of course considerable difference in the methods adopted by the European and Native Contractors, and experience has shown, that much might be learnt on both sides. The former erected saw mills, ballasted his line with a locomotive engine, where it was necessary, and used many mechanical helps, which the latter would hesitate to provide : on the other hand, the Native succeeded in getting a great deal of work done by the inhabitants of the neighbourhood, who were not in his pay as laborers, and by means which would never have entered the mind of a European. He sent agents with samples of the quarried stones and materials for ballast, which he required, and instructed them to make known to the villagers, that he was willing to purchase, at specified rates, all similar materials which they would deliver upon the Railway.

Within these two systems may probably lie the germ of future active competition for public works in India ; but so formidable appears to us the difficulty of obtaining from the resources of this part of the country sufficient labour and materials for the expeditious construction of the extensive lines of railway that have been already sanctioned, or are on the eve of being so, that the full co-operation of both those European and Native parties, who may be competent to the undertaking, will be indispensable. Even with such powerful agency, there are no actual grounds for the belief, that sufficient skilled labor will be procurable for the emergency ; but we shall rely upon the indigenous strength and capabilities of this fine Empire to respond, by their speedy development, to the demand that will be made upon its resources, and to meet the requirements of these great undertakings, which are to train its raw labor, to consume its produce, and scatter money among its remote and destitute inhabitants during their construction, and ultimately to bring them so many permanent advantages. Bold indeed would be the man who would venture to assert, that such an appeal to India will be in vain. " When we want to populate a country," says the free and enlightened citizen, " we run a rail right slick through it," and the Yankee policy will hold good here.

The construction of the first twenty miles of the line from Bombay to Tannah was thrown open to public competition, both in India and in England ; and it was an event of no small import to the public works of this Presidency, that the contract was taken up by an enterprising and substantial firm of English Contractors, who immediately embarked for Bombay to enter upon the management of their distant and speculative undertaking. They despatched a staff of agents and an ample supply of materials, which figured perhaps as

some of the most valuable and interesting consignments of novelties that had of late years been chartered for these shores. And here we are reminded, from their applicability, of the forcible and beautifully descriptive lines of Milton, almost prophetic of the Railway era, in his "Paradise Regained," 3rd book, where he describes the gathered host of the Parthian king marching against the Scythian:—

"The city gates outpour'd

of labouring pioneers

A multitude, with spades and axes arm'd,  
To lay hills plain, fell woods, or valleys fill;  
Or, where plain was, raise hill, or overlay  
With bridges rivers proud, as with a yoke."

Among the new arrivals were a few Navvies of the true breed, and so characteristic was their debut upon our Railway, that at the risk of shocking some of our dilettanti readers, we shall venture to describe it.

The Engineer in charge of the line was seated in his tent on Sion Hill, when a buggy was driven up along the Tannah Road; it stopped, and two Herculean fellows, in their unchanged English clothes, with pipes to boot, jumped out, and climbing the hill, thus accosted him, "Are you the Engineer?" "Yes!" was the reply. "Then here we are at last. I thought we was'n't far out, when we lit on this here cutting. We have been and druv all over the country. We guv the nigger half-a-crown too, but he would'na heed a word we said." How amused would the leviathan contractors of Sevastopol, Messrs. Peto, Brassey and Betts, have been, could they have seen these brawny gangers, standing with faces scarlet-red beneath an Indian midday sun, and have contrasted them with the weak and pigmy native labourers, by whom so much has been already done, and such gigantic undertakings still remain to be accomplished!

Although one of the largest works upon the line was already in progress, and Messrs Faviell and Fowler lost no time in founding their establishment in this country, it was not until after the close of the monsoon of 1851, that operations could be actively begun along the whole contract; but the rapidity with which every valley was exalted, the rough places made smooth, and the various bridges rose into existence, soon proved to the natives how real was that project which had so long been the mere gossip of the Presidency. On the 18th of February 1852, when the first Locomotive Engine was started by the Contractor to assist in the construction of the line, their so-called apathy was roused into eager curiosity and enthusiastic delight, as they witnessed the wonderful performances of that

fleet and powerful machine. We are sure we shall be excused by Dr. Buist, who has himself done so much to expand the native mind, if we here take leave to quote a passage from his *Railway brochure*, which appears to hit off very happily the first impressions that were created by the appearance of the wonder of the age :—

“The first snort of the iron horse dispelled all these illusions, and amongst the more intelligent even of the lower orders seemed to clear the whole mystery away: the intent of all and every part of the scheme became at once apparent, and the results seemed completely to justify all the labour and outlay that had been incurred. The Duke of Wellington once declared in Parliament, that at the close of the Peninsular war he could have gone any where and done anything with the army, so lofty was its confidence, so high its discipline and matchless its power; and these few words seemed to embody the conceptions of the Hindoo in reference to the locomotive—with such a machine he might go any where and do any thing with a swiftness that surpasses the fleetest Arab: it possessed a power to which that of the elephant was nothing, which acquired speed and force as it flew along, and seemed no more likely to become weary or worn at the end of a thousand than of a single mile of journey. The first feeling of Europeans who had not before seen a locomotive, on observing the monster with its enormous train move off so sweetly and softly, that it seemed as if it might have tugged along the fort itself without inconvenience, was to take off their hats and cheer—the triumph seemed perfect and complete; the more phlegmatic native first stared in amazement, and next gave utterance to such sentiments as those we have ascribed to him.”

The Engine made its first start from that little coppice, Phipps's Oart, which is now obliterated from the surface of the Byculla Flats, and the daily scene there became a perfect fair; natives of all castes assembled in thousands to witness the new monster, and were attended with every accessory to show that the occasion was regarded by them as one of rejoicing, and of extraordinary interest and attraction. How amusing would it be, could one collect a tithe of the naïve observations, crude ideas, wild conjectures, and odd queries of that uninitiated multitude! No longer did the natives lag behind our progress, but eager to go ahead they made liberal offers to the Contractor to charter waggons by the month upon a commercial speculation of their own. The first Engine was named “The Falkland,” a compliment which was subsequently acknowledged with an ungracious slight by His Lordship, who, too indifferent to care about presiding at the public opening of the first Railway in India, left Bombay on the very eve of the occasion. Having christened the Engine, it then became a public question what vernacular name should be given to an Indian Railway, and although much was said and written upon the subject, we regret to add, that it was left in its present unsatisfactory state. We venture to hope, that we may be doing a public service by again mooted it for discussion. Nothing

could be more characteristic than the names which this modern system of communication bears in other countries. There is the ugly, but curt and business-like "Railway." In France, they have the nasal and Iambic compound-word *Chemin-de-fer*. The Italians have chosen for themselves the stately and classical *Strada Ferrata*; while the Germans have been no less mindful of the peculiarity of their natural tongue in the adoption of the grammatical, but very un-euphonious *Eisenbahn*. The definition of all these words is identically the same, except in the case of the English name, which is somewhat more exact, and no difficulty should be experienced in constructing corresponding proper names in Hindustani, Mahratti, and Goozeratti. In order to bring the question more directly under public consideration we venture to suggest the following vernacular translations of "A Railway" and "A Locomotive."

| ENGLISH.       | MAHRATHEE.                      | GOOZERATTEE.                      | HINDOOSTANEE                    |
|----------------|---------------------------------|-----------------------------------|---------------------------------|
| A Railway..... | Lokhunde rusta.<br>लोखंडी रस्ता | Lohdano rusto.<br>लोहोडां नौरस्तो | Loheka rusta.<br>لوہہ کا رستا   |
| A Locomotive   | Vafe chee garee.<br>वाफेची गाडी | Baf nee garco.<br>बाफनी गाडी.     | Bhap kee garee.<br>بھاپ کی گاڑی |

We shall be glad, if these names be thought worthy of general acceptance, but should they not pass successfully through the ordeal of criticism, let us hope that some better ones will be suggested by higher vernacular authority and taken into general use.

The main bulk of the works between Bombay and Tannah was finished in a single season, but in consequence of the occurrence of the monsoon of 1852 as well as some delay in the transport of the permanent way materials from England, and in the provision of all the needful appurtenances, it was not until the 16th of April following that Bombay had the good fortune to enrol upon its Chronological Table the public opening of the first Railway in Asia. The works upon it will bear creditable comparison, as to quality, with those of similar extent upon English Railways. The Bridges are, with very few exceptions, built of masonry and brickwork. The gauge is 5 feet 6 inches, and the iron materials of the permanent road are of a particularly strong and durable description. All the materials which have been made use of are excellent. The stone is remarkably good. The bricks, although inferior to those of English manufacture, are cheaper and of fair quality. The Sleepers



consist of Northern and Southern Teak, Blackwood, and Creosoted Memel and of Errool and Khair in small quantities ; six miles of line near Callian have also been laid with iron sleepers, the use of which is still regarded by the Company as experimental. The ballast, or superstratum of the Railway, consists of seasand, broken stone, and that bastard rock which here passes under the name of hard moorum. The stations, we think, are not sufficiently commodious, but this is a venial fault in a Company which omitted all passengers from its traffic estimates. That defect admits of a simple remedy, and far better is it to incur expenditure as the necessity arises for an increase of accommodation, than to have built extensive and florid stations at large outlays voted in haste and to be repented of at leisure.

The next four miles of the line which were constructed lay between Tannah and Perseek Point, and comprised the two large Viaducts and Embankment across the Tannah Creek, and the two Tunnels through the spurs of the Godadunghur Hills. It was let in April 1851, for the sum of Rupees 341,407, to Messrs Wythes and Jackson, and was completed in December 1853. The extension to Callian  $8\frac{1}{2}$  miles was let to the Parsee contractor, Jamsetjee Dorabjee, in May 1852 for the sum of Rupees 165,351, and finished in April 1854. The Railway was opened as far as Callian on the 1st of May 1854.

The fair test of the capabilities for the expeditious construction of Railways in this country is to be found in the periods which have been actually spent upon the execution of the works ; and on that ground, we believe, as much despatch may be claimed for Indian as for English practice. Although it would be somewhat rash to endorse the promissory notes for 200 miles per annum of his own line alone, which Colonel Kennedy has issued, we venture to correct Colonel Cotton's statement, that the progress of Indian Railways may reasonably be calculated at so low a rate as 10 miles a year. If such heavy works as were encountered between Bombay and Callian could be completed within the short period of two years, why may not much greater lengths of Railway be made with equal despatch in any districts, where the engineering features are not more formidable than those of the Experimental Line ? When two officers, whatever may be their scientific attainments and abilities, venture to promulgate such extreme opinions upon a question of vital public interest, it is assuredly a matter of congratulation that their statements are so conflicting as to refute each other.

The entire cost of the Railway from Bombay to Callian amounted to £8,800 a mile, but that sum we understand includes £500 to cover the expenses that were incurred, from the year 1845 to

1850, in preliminary investigations upon the Ghauts and over an extensive range of country. As these surely ought not to be made wholly chargeable to the mileage cost of the Experimental Line, the actual outlay should be reduced to £8,400. The average cost upon English Railways has been about £34,000 per mile. Making every allowance, therefore, for the greater difficulties of that country, and for those manifold and heavy expenses which were unavoidable there, but have been eliminated from our Indian accounts, we see just grounds for admitting, that the Bombay Experimental Line has been constructed with remarkable cheapness. What is more, there seems from Mr. Berkley's late report to be every reason to expect, that, notwithstanding the formidable impediment of the Syhadree Ghauts, the same economical character will be sustained upon the much needed extensions.

To those who may regard extensive litigation as an evidence of a high degree of civilization, Bombay must indeed appear in a backward and benighted condition, for the whole legal expenses of the Experimental Line have amounted to only £40 a mile, while the same item of expenditure upon English Railways ranged from £500 to £10,000 a mile, even before their construction was commenced. If therefore the native population have contributed but little to the funds of the Railway Company, they have certainly not embarrassed its proceedings by their opposition; and it is highly honorable to them that, in some instances, they transferred their property free of purchase to the Government for railway purposes, and in others disposed of it upon extremely moderate terms. The same fact might be stated of the Russian lines, but there the land was conceded in obedience to an Imperial Ukase; here it was the spontaneous effusion of liberality and public spirit. It would be ungenerous to suppose that the disinterestedness, which some of the Bombay proprietors evinced in this particular, was the result of a want of appreciation of their rights and privileges; for on the contrary, when disputes arose, they defended them with independence and acuteness, upon just such grounds as would have been taken by an English land-owner similarly situated. That native ingenuity should have been manifested to such a degree in this and most other branches of railway experience is not only a legitimate ground of promise and encouragement to that enterprise, but opens a wide field of contemplation to the moralist and the politician.

From the Pamphlet entitled "Observations on Colonel Cotton's Proposed System of Cheap Railroads for India, by a Madras Officer," and which was lately published at Madras, it would seem that both in Bombay and Bengal there has been considerable extravagance in the construction of the initiatory lines, and that Madras is to be the

bulwark of economy. He has put the cost of our railway, at £9,000 per mile, in juxtaposition with the assumed amount of £4,000 for that portion of the Madras line which is still under construction. "A Madras Officer" is well conversant with the details of his own railway, but speaks about ours only to the best of his recollection, and has no means of reference; it may perhaps therefore make some qualification in his comparative statement, if he be apprised of the difference of the two tracts of country, and of the important fact, that the Bombay Railway has been completed in all its works for a double road, and has, by the order of the Hon'ble Court, been laid as far as Tannah (21 miles) with a double line of heavy rails, weighing 85 lbs. to the lineal yard, while the Madras line is to consist of a single road constructed with much lighter rails. If these points be fairly considered, and due allowance made for the great expense of the preliminary investigations in this Presidency, we doubt not, that on the completion of the Madras Railway the comparison will be found to exhibit less difference than "A Madras Officer" now supposes.

It can seldom be an easy problem to compare the cost of one railway with another, because the variations in the physical character of the districts of a country would render it necessary, in most instances, to deal with essentially different elements of calculation; and it must become still more difficult of solution, when a railway already constructed is to be compared with one that is only projected—when they are 600 miles apart, and are separated too by such natural barriers as to diversify nearly the entire range of that local economy upon which their cost is so greatly dependant.

We shall now take occasion to correct some serious misstatements which have been circulated in the public Journals, both here and in England, upon the authority of a distinguished Officer, from whom accuracy on such an important public matter might at least have been expected. Colonel Cotton, addressing in their Town Hall on the 17th of January last an assembly of Manchester Merchants, to whom India already owes a debt of gratitude and still looks anxiously for valuable assistance, informed his audience, that the Railway in Bombay is costing £15,000 a mile, and is to ascend the Ghauts, 2,500 feet above Bombay, and then descend 2000 feet to the Cotton fields of Berar. The actual cost of the Bombay Railway, as already completed, has amounted to only £8400 per mile. The top of the Thul Ghaut Incline is only 1900 feet above Bombay, and the maximum descent made by the Railway between the Ghaut summit and Berar is only 1280 feet. Colonel Cotton therefore in pleading the cause of his own project nearly doubled the actual cost of our Railway, added 600 feet to the elevation of the Ghaut summit, and made the level of Berar, at a distance of 400 miles from the sea and not far

from the source of the rapid and precipitous River Taptee, 98 feet below the Esplanade and 87 feet below high water mark at Bombay ! He is also reported to have aggravated these inexcusable blunders, by making his own inaccurate figures the basis of a most erroneous calculation of the probable cost of extending the Great Indian Peninsula Railway to Berar.\* Since he has so widely misled many earnest promoters of Indian public works upon such important facts, we are not at all disposed to place any confidence in his opinion that the projected Railway from Bombay to Berar "is one of the most surprising mistakes ever made," and it is to be hoped that the Manchester Merchants will at once discard it. Let the Colonel advocate his Godavery Navigation Scheme as strongly as he can—it is his duty to do so ; if there have been faults in projecting public works, even in Bombay, which he is shrewd enough to discern, let him denounce them without extenuation, for he is rendering a public service ; but it is a pity to see an eminent officer, and an author too, whose pride it is to have earned the reputation of being one of the foremost laborers for India's commonwealth, riding his own hobby so violently, as either through ignorance or carelessness to discourage her Railway enterprise by grossly exaggerating the cost of one of our principal lines, and overstating the physical difficulties with which it has to contend. If Colonel Cotton's statements had passed without contradiction, he would, we believe, unwittingly, have lent the weight of his authority to deprive India of a system of communications, which, though in his own estimation not absolutely the best for her interests, is allowed by the world to be the most powerful agent for the promotion of commerce and civilization.

No great invention of the present age has passed through the various stages of development in so short a period as the Electric Telegraph. Its rapid transition from the region of theory to that of popular illustration in some of the principal English Reviews, has been almost unprecedented. As we hope ere long to treat of this subject in a manner worthy of its importance, we shall now merely allude to the fact, that an Electric Telegraph is in course of construction by the G. I. P. Railway Company, which will contribute greatly to the safety and efficiency of the line, particularly as it is to be laid chiefly with only a single road. Wonderful as the Electric Telegraph's effects may be, and grand as the performances of a railway undoubtedly are, yet still more marvellous results are obtained by their combination. Many extraordinary feats of this powerful co-operation have been already published, and we shall with great diffidence venture upon the ground that has been so observantly and so merrily traversed by our great prototype, only for the purpose of recounting one instance of its amazing capabilities. An elderly traveller, a very particular old gen-

tleman, who was going up to London by an ordinary train, left his silk umbrella at the Birmingham Station. He was sadly distressed about it, and at one of the intermediate stations had a telegraphic message sent back to give notice of the missing article. On his arrival at Euston Square he immediately mentioned his loss to the head porter, who civilly requested him "to walk this way," and, conducting him to the lost-luggage office, produced an umbrella, and asked if it were the one which had been left at Birmingham. The old gentleman, who had not noticed the express train as it passed the one he was in at Wolverton Station, stood aghast at the apparition before him. "Good God!" said he, "I knew you sent messages by the Electric Telegraph, but never dreamt that it carried umbrellas also!"

We regret that our limited space will only enable us to touch upon the native labor of this country in a cursory manner, for the subject is so fresh and interesting that a whole volume might be usefully devoted to it. In this, as in many other instances, did railway experience baffle the prejudices of the *cognoscenti*. It was firmly maintained, even by those who were familiar with their characteristics, that the country laborers would religiously adhere to their accustomed means and methods of doing work, that a superstitious abhorrence of innovations would thwart every effort to aid them by mechanical appliances, and that, even should this repugnance be overcome, a stolid stupidity in all practical matters would neutralise their advantages, as in the ever-memorable illustration of the Hindu carrying a wheelbarrow upon his head. It was affirmed that European agents recently arrived from home, and ignorant of the Hindu language and customs, would never be able to keep their men upon the works, and elaborate papers were indited by able Government Officers upon the most efficacious measures that could be adopted for that purpose. A single month however served to dissipate some of these delusions, by exhibiting native workmen in the performance of many kinds of new manipulations; while so far from any difficulty being experienced in retaining their services, it is the fact that at one time during the execution of the works as many as 10,000 men of all classes were regularly employed upon the line. In collecting the requisite number of artisans, it is necessary to use considerable foresight and to make great exertions, because many of them come from remote parts, and have to be drawn from their homes. As an indication of their honesty, it may rather astonish English engineers and contractors to learn that emissaries are sent for them in various directions, that considerable advances of cash are made for their promise to join the work at the proper season, and that these engagements are faithfully kept.

Docile and handy, the efficiency of native workmen may by patient training be greatly increased, and the rude, despised, and needy

Mahars, be converted into skilful artisans. With all this, they are feeble, and want those comforts which are essential to health and the fostering of their strength and vigor, when exposed, as of necessity upon railways, to the vicissitudes of the seasons in unhealthy spots, where they can find no abodes except the poor shelter they can erect for themselves out of the sticks and leaves of the jungle or the gleanings of the straw-yard. The consequences are, that their effective labor is often seriously diminished by sickness, and that even at the best of times they fall very far short of the English standard. Were it otherwise, the economy of Indian as compared with English labor would be immense, but from those disadvantages they approximate much more closely than would be generally imagined. By way of illustration, we shall take the case of an excavator, or navigator, as he would be called at home, working in an ordinary cutting. The Hindu would be paid 5½d. and the "Navy" 3s. 6d. a day; but then the former could turn out barely one-third of the work that the latter would do, so that the relative economy of the two classes would be as two to one, or thereabouts, in favor of this country. There is another important consideration, which also impairs the efficiency of country labor upon railways. The number of men which it is possible to employ upon a work, is frequently limited by its form and dimensions and the proper mode of execution, and since one Englishman does the work of three natives, it is evident that greater force can be put upon it at the same time in the one case than in the other, and the rate of progress be proportionally increased. Here, however, the climate tells in favor of this country, and when the advantages of constant fine weather for eight months of the year are taken into account, the despatch is very nearly assimilated in both cases. Thus does nature strike a balance between country and country, and man and man.

The following may be received as a fair comparison of the various classes of English and Native labor.

| Classes of Labor.  | Average rate of pay per diem. |    |        |    | Proportion of work done by each. |        | Relative cost of labor in each country. |        |
|--------------------|-------------------------------|----|--------|----|----------------------------------|--------|---|--------|
|                    | England                       |    | Bombay |    | England                          | Bombay | England                                 | Bombay |
|                    | s.                            | d. | s.     | d. |                                  |        |   |        |
| Masons . . . . .   | 5                             | 0  | 1      | 2  | 2½                               | 1      | 2                                       | 1      |
| Bricklayers . . .  | 5                             | 0  | 1      | 2  | 4                                | 1      | 1½                                      | 1      |
| Carpenters . . .   | 5                             | 0  | 1      | 2  | 3                                | 1      | 1½                                      | 1      |
| Miners . . . . .   | 5                             | 0  | 0      | 9  | 3                                | 1      | 2½                                      | 1      |
| Excavators . . .   | 3                             | 6  | 0      | 5½ | 3½                               | 1      | 2                                       | 1      |
| Laborers . . . . . | 2                             | 9  | 0      | 4½ | 3                                | 1      | 2½                                      | 1      |

It is apparent from this Table that the difference of cost between skilled and unskilled labor is less in England than in Bombay, a result which is fully borne out by the comparative scarcity of the former in this country. We would also remind our readers, in examining this table, that the comparison is made between simple labor only, and that the economy in favor of Bombay would be most materially reduced if it were instituted between the cost of work actually executed, because in that view of the question English labor would have the powerful aid of all its appliances and superiority of system, while India would suffer from the want of such auxiliaries, from its defective and clumsy methods, and from a variety of drawbacks and disadvantages peculiar to native customs.

Strikes, which so often arrest the progress of public works in more civilised countries, have never yet impeded them in this, and the semblance of such a movement has occurred upon very few occasions. In the month of November, soon after the commencement of the Coorla Cutting, a deputation of native workmen waited upon the contractor with a complaint about the hours of working, which were then from 8 a. m. to 6 p. m. It was not a Ten Hours' Movement that could terminate in an Act of Parliament, but the claim was made by them with quite as much determination as by our Lancashire spinners; and they plainly told their employer, that unless it were complied with they would refuse to do his work. How incredible will it seem to the great unwashed upon English Railways, yet how natural was it for the natives of this country, that they solicited their master to allow them to begin their day an hour earlier, so that they might leave work before sunset, because at 6 o'clock the water was too cold for them to bathe!

One day the Engineer, who was engaged at Sion, was surprised to observe all the native laborers from the large cutting in that neighbourhood approaching along the Vellard. He immediately enquired why they had left their work. "We cannot get our wages," said they; but on his telling them that he would guarantee their payment, they immediately turned round, and like Richard II. he marched the pacified rabble back to work.

Every thing was going on as smoothly as usual at the Tannah Viaduct; the masons were dressing and scabbling; the bricklayers turning their arches; the bamboo-coolies toiling up the stages with their heavy loads; the women grinding chunam, and carrying the lighter materials to the groups of workmen; when suddenly a loud chattering arose, and the female laborers, one and all, threw down their baskets and refused to work. The Viaduct became a perfect Babel. The cause of the rebellion was legitimate enough. An overlooker had been guilty of an act of indiscretion towards

one of their number, which the fair community considered *contra bonos mores*, and immediately resented by an unanimous outburst of virtuous indignation, and it was only upon the delinquent making amends for his misbehaviour that they consented to resume work.

The rapid improvement of the natives has, sometimes, been most remarkable, and has been a theme of wonder amongst the old practical hands of the Railway Department. At the crossing of the Tannah Creek, we are informed that barrow "runs" were laid down and worked in great lengths, and with wonderful steadiness and activity. At the Viaducts untrained lads were taken on at low pay, and in the course of a few months qualified themselves for employment as good average masons; while in the tunnels, at which the natives were of necessity perfect novices, the mining was carried on in such a manner as to call forth the admiration of those conversant with English practice. It is perfectly true, that the native is prone to adhere to his own method of work, and he is often right in doing so. In all mining operations, for instance, he will keep to the use of the churn, instead of the hammer-drill; and although an English miner would no doubt tell him, that the hammer-drill is the more effective tool, his special aptitude for working the churn-drill makes it an act of prudence for his employer to leave it in his hands. Again, the system of the itinerant Deccan laborers, called Woodaries, is as old as the hills, and he is a wise Contractor who turns it to the best account by applying it where it may be effective. There is something peculiarly interesting and independent about this wild tribe. At the close of the Monsoon they leave their homes upon the Deccan, and descend to the Concan for work. As soon as they have found it, and made their terms with their employer, they pitch their little gipsy hovels on the spot, and rigidly carry out their accustomed habits. They will only do task work, and cannot be induced to take employment by the day. They will not observe the ordinary regulations for labor, but most pertinaciously insist upon keeping to their own hours. It is amusing to see them, men, women, and children, in strings like ants, carrying their baskets of earth, and as they pass their task master receiving in turn a ticket for their loads. Every day at 3 o'clock (no overtime for them) they congregate around him, settle their day's account, and go home to divide their earnings, and spend their eventide as they choose. When the Monsoon approaches, they prepare like swallows for their homeward flight, and a gift of a silver belt, a bracelet, or a saree to a male or female ganger, is as certain to bring them back at the opening of the ensuing season, as they themselves are again to pursue their time-honored habits.

The laboring classes of this part of India are characterized by so many peculiarities, that we cannot allow ourselves to enter upon a



consideration of their merits and defects, or even to describe them as fully as they deserve, but must be content with a brief allusion to a few of them, as they occur to us. The most striking are derived from caste prejudices, which have an important influence upon the efficiency and despatch of many native operations. They possess one most unfavorable feature, that of reducing the capabilities of men of an acknowledged superior order to the level of those who stand far beneath them in the social scale:—The authority of a foreman of high caste over all those workmen who recognize caste distinctions, is an undoubted advantage in conducting public works; but high-caste men are unfortunately cramped in their exertions by many conventionalities, while the humble Mahar, owing to his utter indifference to caste notions, is untrammelled by the fetters of rigid custom, and capable of raising his effective labor to a higher standard of excellence. It is curious to observe in a country where social positions are so religiously defined, the lowest orders delighting in any triumph over their superiors and striving to achieve it. The spirit may in some points of view be questionable, but it certainly leads to many practical advantages. It possesses to a very great degree the quality of emulation, and would be highly commendable, were it not for the sentiments of envy and disrespect which engender it. Not only are the members of this inferior class of natives more easily trained to improved methods of executing the varieties of work, but from their exposed and hardy life and more substantial sustenance they also possess greater physical strength and endurance.

The priest is invariably to be found among large bodies of country laborers; though he leads an austere and secluded life, yet his spiritual duties never deter him from attending upon pay-day to receive the voluntary contributions of his faithful votaries. He is held in the greatest veneration by them, and an insult to him is sure to be resented by the desertion of the work.

The influence of a distinction of caste upon a mixed body of laborers, whenever serious accidents occur, is extraordinary. The natural sympathy of the heart assumes the outward semblance of a mere conventional sentiment. For while the sad fate of an individual is mourned over as a general affliction by one section of the gang, the remainder will continue their operations with imperturbable nonchalance. "Where's ganger Govind?" asked the Manager one day of some men working in a cutting. "He hasn't come to-day, Sahib." "Why not?" "He's dead." "A very good reason too, but where are the rest of the men?" "They're gone to bury him," was the cool reply.

The strict observance of long and frequent holidays is another point, in which native customs and religion impair the efficiency of labor. It is true, that in England a serious loss of time is incurred

after every pay-day, but the same habit obtains here also. By Sunday work and the shortness of their meal hours the natives might compensate in some measure for the time wasted during their holidays, but the principles of their employers very properly prevent the former being turned to account, while the advantage of the latter is neutralized by indolence.

The Hindu generally travels a considerable distance to his work, and takes with him his wife and family and all his worldly goods; but on the approach of the monsoon, he prepares to return to his native village. If a contractor wishes to retain him later in the season than is customary, the only means of doing so is to hold back a month's wages. No reward would induce the man to stay longer than he thinks will allow of his safe journey home, and many of them will even steal off without their arrears of pay rather than remain beyond that period.

Task work is even a greater incentive to exertion in this country than in England. The Truck System so frequently condemned there does not exist in this part of India, but as soon as laborers settle in a neighbourhood not only do shops or bazaars make their sudden appearance, but whole villages actually shoot into existence with mushroom-like rapidity. Independent as this process may seem, we are much mistaken, if the common evil of the Truck System—extortion—be not practised here to a still more flagrant extent than in England.

A native stonemason never lifts a stone upon a bench to work it as an Englishman would do, but stoops or sits upon the ground, or perches himself upon one corner of the stone, while he dresses off the rest of it. The carpenter's posture is even still more eccentric: he will not use a bench, but squats beside his work, and becomes quadrumanous. He is almost as nimble with his toes as with his fingers. It would put him out terribly to have to stand up to work, for he would then lose a great deal of his power of manipulation. It is strange also to note, that while in some operations there are so many "arms" in the service of an individual artificer, yet in other parts of the same craft, such as planing and using the hand-saw, the natives will work in pairs to accomplish what an Englishman would do single-handed.

A practical man might instance a hundred peculiarities in the mechanical methods which exist among country artisans. He might demonstrate their barbarism, their ludicrous eccentricity, clumsiness, and want of economy both in time and cost; yet we do not believe that many would be disposed to deny them the credit of employing their own means with remarkable facility and despatch, and it must now also be admitted, that when properly trained their handiness with European appliances is considerable. One sterling merit in particular is generally conceded to them, that they are not

guilty of so much "scamping" in the execution of their work as the more clever but less conscientious hands in England. The willingness of a native mason to increase his skill was ridiculously manifested at one of the bridges. The Contractor's manager, who had taken considerable trouble with the man, finding one day that he had disobeyed his orders, lost his temper, and on the spur of the moment struck him. The striker returned to the work a few days afterwards, and made amends by expressing his sorrow for having hit the native; but learnt to his surprise that this expenditure of feeling was useless, when the man replied, "Never mind; Sahib may hit me if he likes. He teaches me my handicraft."

We well remember the hint that used to be given to English tourists in Italy, that the two words "Roba" and "Legno" would carry them through the country, because every thing was "Roba" that was not "Legno," and every thing was "Legno" that was not "Roba." Quite as striking examples of 'aconism might be adduced from the vernacular attainments of the railway foremen. The entire vocabulary of some of them long consisted of only a few monosyllables, which by a discriminating use were made to convey all their positive and negative orders. The fact was, necessity led them to adopt the expedients of dumb show and gesticulation, which were far more effectual than words for the management of the workmen.

The secret of the improvement of native laborers lies in one indispensable condition—that they shall be constantly under the eye and teaching of a practical inspector of the work. Drawings, verbal orders, or even occasional teaching are of no avail; for always painstaking, as they are, if the inspector turns his back, and leaves them to themselves for any length of time, he will be almost sure to find upon his return, that most scrupulous care has been taken to do almost every thing wrong. If he be earnest and patient with them, he will infallibly succeed in turning out excellent work and attaching the laborers to himself to a degree but little experienced in other countries. Their attachment for one of the foremen at the tunnels was remarkable. Of a patient and good-natured disposition, an industrious laborer and the master of his work, he won the confidence of the natives, and, when old Tom Craggle, with his good heart and smiling weather-beaten face, left Perseek, he had as honest and enthusiastic an ovation from his workmen, as ever greeted Sir Erskine Perry or any other hero on his homeward embarkation from Apollo Bunder. Yet this man had not the advantages of being familiar either with the native language or customs. He was a rough North Briton. By what secret influence then did he, who would give such an order as this to the natives, "Now bonnie lad, gang thy ways and fetch a cannie stone two foot by fourteen, pinched," make himself under-

stood, if it were not by his own earnest exertions, by patient painstaking, and constant intercourse with them? Surely, this points a moral for the pursuit of even greater purposes in this empire than railway making. You may circulate your books, deliver your lectures, and legislate as you please, but so long as you maintain an exclusive position, and shun native associations with repugnance, you are leading as forlorn a hope against their ignorance, their prejudices, and their superstition, as our railway foreman would have done, had he set his laborers their task, and with a few scanty instructions left them to accomplish it.

The increased value which has been given to native labor, must be regarded as one of the happiest and most promising results of railway construction. The Hindus have now earned for themselves a higher position among the working classes of the civilised world. They have not won it by the erection of some wonderful, though useless, piles of masonry, like the pyramids, by hollowing out some hidden and benighted caverns in their mountain precipices, nor by the building of some "solemn temples" or "gorgeous palaces," which, as the clouds of barbarism and superstition roll away,

" Shall dissolve ;  
And, like this unsubstantial pageant faded,  
Leave not a rack behind."

They have made for themselves a channel, through which the march of intellect may eventually penetrate the inmost recesses of their native land, and in the same measure as railways shall contribute to their material welfare, let us hope that they may be the means of endowing them with that moral and religious enlightenment which has illustrated more blessed though not more gifted nations than British India.

We have taken great pains to master the bent and capacity of the native mind, and, strange as it may seem to many, have recognised in it a degree of ingenuity and acumen, which, we are satisfied, would, if properly trained, qualify them to fill no mean position in mechanical attainments. We have endeavoured to do them justice for their successful efforts in the new work, and are confident, that it would be a worthy and promising purpose to devise some means of exciting them to cultivate their abilities to a higher and more useful degree of excellence. We may be told, that the readiest way of achieving this would be by the ordinary course of Political Economy, and that as we pay for such services at their full value, so we shall encourage their development; but even among nations far more advanced in technical pursuits than this, do we not find artificial incitements to emulation, and associations for promoting the advancement of the arts and sciences, successfully adopted?

The Indian Government has resolved to establish an Engineering College in this Presidency, and, in furtherance of the very politic and honorable objects which form the basis of that resolution, we would suggest that the Bombay Mechanics' Institution should be immediately established upon a footing of, more general usefulness than it at present occupies. If the cause were advocated by men of influence and others, whose experience of similar societies would enable them to organise the association, we should not doubt of its success and popularity. It is already under the patronage of Lord Elphinstone, whose good will and exemplary intentions towards the natives are hereditary and have been evinced by His Lordship on so many occasions. Under the auspices of its Noble President, Vice Presidents and a Council might easily be nominated, and the list of members be greatly enlarged. The subscriptions might, if necessary, be so much reduced as to admit within the Institution the poorest artisans of Bombay. Periodical evening meetings might be held during an appointed season for the discussion of mechanical questions of real public interest and usefulness. Annual prizes of medals might be given for such attainments as the best invention by local ingenuity, the best essay upon a mechanical subject, or the finest mechanical drawing. It is our impression, that if the benefits of the Institution were extended by well-considered measures, the day of annual distribution of prizes would be a source of pride to the community; would year by year add something to our mechanical store, and thus obtain for us a more creditable position in this busy age of progress and invention. Look at every thing around us in this vast and rich Empire! Do not circumstances most pointedly claim our strenuous efforts? India abounds in all those materials which constitute the very staples of manufactures. Is it not then incumbent upon us all to discharge towards her those duties, which have become for ages the first principles of commercial success and national grandeur in the Western World?

The inveterate misconceptions of the native character were as strikingly exemplified in the instance of their locomotive or excursive propensities, as in other matters connected with the subject of an Indian Railway; and so general was the conviction, that the people would not avail themselves of its advantages, that even the Railway Company, when appealing to the confidence of the Government and the public in favour of the commercial merits of their undertaking, deemed it expedient to exclude from the estimate of their profits all returns that were derivable from passenger traffic. Notwithstanding the amazing demonstration of interest and excitement that was made by the native population of this Island at the

public opening of the line, many of those, to whose opinions long familiarity with this country gave authority, still believed that its working would return but a beggarly account of empty trains, and so impressed were we by the forebodings of those around us, that despite our own conviction, when we visited the terminus to witness the departure of the first public train, we knew not whether to anticipate a crowded attendance or a deserted platform.

It had long been affirmed, that unless the saving of time were duly placed to its credit, the new system of locomotion would be far more expensive than the existing modes of travelling, either by water or by the common roads, and it was confidently assumed, that as the natives, especially the lower classes, did not value despatch, they would rather keep to their old conveyances than have recourse to it. How fallacious is the supposition, that a Native is regardless of the value of his own time! The demonstration of a railway train was not needed to disprove it; analogy disproves it in a thousand cases. There is hardly an ordinary negotiation, upon which, if a European were to enter with a Native under the impression that he would forget such an important item in his calculations, he would not have to repent of his indiscretion.

So erroneous were the prognostications of the failure of passenger traffic, that the Natives, down even to the lowest orders, immediately availed themselves of the new mode of conveyance, and one of the very first points publicly mooted upon the subject was the question, whether the members of a poor and despicable caste should be permitted to travel by the ordinary trains, unless a separate carriage were provided for them. We remember to have witnessed another striking instance of the popularity of the railway,—a poor ragged little girl, companionless, and ticket in hand, threading her way through the groups along the platform, and taking her place in a third class carriage with all the independence of a commercial traveller.

Useful as our Bombay Railway undoubtedly is, some late proceedings of the Board of Conservancy have demonstrated, that there may be occasions on which its accommodation will be rejected. A new "Draft Act for the Regulation of Burial Grounds and other places for the disposal of the Dead within the Island of Bombay" was under discussion, when it was suggested, that provision should be made in it for the conveyance of the dead by Railway to the grave. The measure was opposed, and if there be any honesty in our own veneration for religious rites, the objections that were taken to its adoption, (amusing as they may be to strangers,) should be valid among those who know the rigidity of Hindu customs and who profess to respect them.

"It was stated, that Hindoos can never adopt the plan. That the near

relatives and friends of the deceased will never allow other castes to touch the dead body, which they are obliged to carry on their own shoulders until it is laid on the pile. The proposal is therefore not in consonance with the religion of the governed; and supposing for argument's sake they are prevailed upon to do so, still with regard to time, how can the plan succeed, for one may die in the morning, the other at noon, and the third in the evening, and it is impossible they can be kept over until the time of the Train. Besides, they cannot be carried together, for their religious prejudices cannot admit of it. It is a religious custom with them, that those that attend the funeral can never take any food, until the dead body is either burnt or buried, and they have returned home and washed. The people in the house and near relatives also cannot eat any thing, until the body is removed from the house and burnt or buried. The Parsee's religious custom can never admit their bodies being removed in railway carriages, and they will likewise have a very great objection to the power being allowed to any one to close any of their cemeteries at any time, on some of which they have spent upwards of a Lac of Rupees."

If any idea might claim originality, surely this would seem to do so, but it is not the offspring of the Bombay mind. It, like almost every other practical conception, already constitutes the foundation of an English Company:—The London Necropolis and National Mausoleum Company. There is a branch line to the Cemetery; they will undertake burials of coffined corpses of four classes, from £ 17-0-4 to £ 2-0-9, from the Railway station, or even the whole funeral from the residence of the deceased; and the Directors have had their dinner at the Albion!! Yet there is nothing new under the sun, and even the London Necropolis and National Mausoleum Company must hear of things, that were never dreamt of in their philosophy. They may search in vain all the records of their transactions for such a Clause as this:

4. "A clause for the conveyance by Railway of dead cattle, and of the dead of such castes of Moguls as have no religious objections to adopt the measure."

What a marvellous dispensation of retributive justice, that after the lapse of ages the defunct descendants of Sultan Mahmud, the Conqueror of India, should, at the instigation of a Hindu, be consigned to the same clause as "dead cattle"!—That Britons, who have so long made sport of his effigy, should at length by the decree of a Bombay Board of Conservancy consent to make the *amende* to the "Great Mogul" by honoring his Manes with a special train, and burying him decently in the palm groves of Mahim or Matoonga, "if he has no religious objections to adopt the measure."

Our Parliamentary Train is to be for the "dead" not for the poor. No return tickets will be taken then, for those mournful trains will run to

"The undiscovered country, from whose bourn  
No traveller returns."

"Traffic in the dead," which once led to transportation or the scaffold, and "dead weight," so long the stumbling block of all railway managers, will soon become the source of larger dividends and commercial prosperity. The "Burial Toll" and the "Funeral Train" will henceforth bear a Railway designation, and the "*Facilis descensus Averni*," derive an "express" meaning from the modern customs of Bombay. We cannot designate the new species of traffic as either "Passenger" or "Goods," but, whatever its denomination may be, let not the Railway Company count much upon its returns. The Hindus decline the "special" boon; the Parsees protest against it; the Moguls may have religious objections to the measure; and cattle cannot have a voice in the matter, for there are no *Æsops* now-a-days.

The average monthly number of passengers conveyed by the Railway during its earlier operations was 35,146; and it is highly satisfactory to find that now, when novelty has ceased to attract any casual travellers, it is increased to 49,592. The greatest number that have ever travelled upon any one day amounted to 9,114, and the maximum in any single week was 27,134.

The same general characteristics are discovered in the Passenger Traffic of an Indian Railway, as prevail among other travelling nations. The lowest class is the most numerous and returns the largest receipts. It continues to increase, while the higher classes undergo but little alteration. Excursion Trains are freely taken advantage of, and are as conducive to the profit of the Company, as they are to the pleasure of the public. The same remarks are made here as in Europe about persons of a superior order travelling in an unbecoming class. Here, as at home, those who pay the lowest fare grumble at the accommodation which is afforded them, and we certainly think that there is some reason for dissatisfaction in the arrangements for conveying the Third Class Passengers. They are so densely crowded in the waggons; men, women and children, all higgledy-piggledy, that many are, no doubt, deterred from availing themselves of the railway, who would otherwise contribute to its receipts. English experience, which has been found so beneficial in other instances, might perhaps be advantageously applied in this, and be found to augment their numbers by increasing their comforts.

The complaints which are often heard, of the low speed of the trains, are decidedly unreasonable, and those inconsiderate persons who make them, must be unmindful of the facts, that while in England a vast traffic of wealthy passengers supports the lines, here the travellers consist almost entirely of those who can afford to pay only the lowest fare; and that while at home even with the aid of Parliament, only one daily train in each direction is provided for the poor at the rate of a penny a mile, every public train that starts in



this country is open to them at  $1\frac{1}{2}$  farthing. The very existence of Railways in India depends upon the safety and economy with which they can be worked, and it will, we think, be long ere this will be practicable at any but moderate speeds. Goods have not yet found their way to the line except in very small quantities. It passes along and through the Salt Pans, yet carries no salt; it runs to Tannah where there is a tolerable amount of local traffic, and where an extensive trade touches *in transitu*, both up and down the country, yet the railway has gathered nothing worth notice. It goes to Callian, a town of moderate business and population and not far distant from Bhewndy, the principal depot of the Concan, without diminishing the loads of the country conveyances. This want of success may perhaps be attributable to the formidable competition of the cheap water carriage from Kussely Bunder to Bombay, and to the difficulty of overcoming the vested interests and organised arrangements for the conveyance of the trade. So long however as those obstacles exist, the Goods' Traffic can only be created in increments by negotiations and by the force of greater convenience, despatch, and economy in the new mode of conveyance; but when once it has reached a certain limit and the railway is appreciated as the best and cheapest communication, the general stream of trade will pour itself unsolicited into its station yards. We hope that an early prospect of far better results awaits our railway, and that as soon as its extensions are open to the Agra and the Poona Roads, the efforts of its promoters not only may be crowned with success by its public usefulness, but the enterprise of the Company, which has undertaken this great work, also be rewarded by increased returns.

It has been the good fortune of the Bengal Presidency to celebrate within the last few weeks the opening of 122 miles of their Railway, while we yet possess only 34 miles, and even these of but little public service; because the line terminates at an unimportant place, and, as far as progress into the interior of the country is concerned, at a cul-de-sac. It must not however be supposed, that Bombay is not to enjoy equally with her sister Presidencies the benefits of that bold and statesmanlike adoption of the Railway System, which the Governor General's Memorable Minute of April 20th 1853, to his infinite honor, recommended to the East India Company as an indispensable and infallible measure for developing the riches and resources of the Empire. Of all public men that have ever held the reins of Government in India, we know of none, who would, with the same discernment, have recognised the merits of that System in the success of comparatively limited experiments, and with the same promptitude and determination have made its speedy and extensive establishment the leading policy of his administration.

A brief review of what has been effected by investigation in this exceptional and difficult part of the country will serve to elucidate to the public mind the present posture of our railway affairs, and perhaps to inspire with well grounded hope, the anticipations of many well wishers of Western India, whom protracted and unaccountable delay may have thrown into some despondency regarding our progress with these important works.

The original design for the Trunk Line from Bombay to Central India, was to carry it up the Malsej Ghaut, where it was to bifurcate into two divergent branches. One of these was to run through Khandesh, up the Nerbudda Valley to Mirzapore in the trans-peninsular direction, and to open a communication with the North Western Provinces of Bengal by way of Agra. The other was to descend the valley of the Seena to Sholapore and so on to Madras. The conception of this design was unexceptionable, and had the Malsej Ghaut presented less formidable features, it would undoubtedly have been a wise measure to centralise the passage of the Syhadree Range, even at the sacrifice of a moderate detour in both of the main lines. This plan was devised by the late John Chapman who, with great energy of character, a discerning mind, much aptitude for writing, and many other excellent qualities, which gained for him the respect of the community, elaborated it, creditably in the face of serious difficulties and discouragements. He was ably seconded by two professional men, whose views, derived from English practice, enabled him, in 1846, when railways were the chief topic of the day, to put his scheme into such a form as to command the support not only of the leading men in Bombay, but also of many railway authorities at home. If Mr. Chapman, to whose memory now alone belongs any distinction he may have earned amongst us, accomplished no greater objects in the Bombay Presidency than this, he at least deserves the honor of having initiated our Railway System and founded the Great Indian Peninsula Railway Company.

After its incorporation the preliminary steps, taken by that Company, were to arrange for the construction of the so-called Experimental Line to Callian; and this being effected, they proceeded during the season of 1850-51 to explore the country, and lay out the extensions of their Railway. The Syhadree Ghauts were thoroughly examined and the merits of the Malsej Ghaut ascent investigated, when it was discovered and placed beyond doubt, that the obstacles it presented were almost insuperable, and would involve such serious delay and expense, as to neutralise the advantages of a central ascent of the Ghauts. For these and other reasons it was decided to abandon it, and the result of the early inspection of the country was to demonstrate, that the routes of the two existing main roads had

been judiciously selected, and presented the greatest facilities for the construction of railways. Foresight is as frequently baffled in railway proceedings as in other human affairs; and now that the Thul and Bhore Ghauts have been brought within the limits of practicability for the establishment of locomotive lines of railway, it is interesting to note, that in the year 1846 the approach to the Thul Ghaut was reported as impracticable, and that the Bhore Ghaut was pronounced to be inaccessible by any better gradient than 1 in 10.

So good a *prima facie* case was represented in favour of the Thul Ghaut Line to Khandesh and the Bhore Ghaut Line to Poonah, that in 1851 the Government sanction was given for their being laid out and estimated, which was done during the season of 1851-52, and in September 1852 Mr. Berkley wrote that Report, which has subsequently led to the construction of the Bhore Ghaut Line, and which we sincerely hope will likewise soon prove to be the groundwork of the Railway to Khandesh. These projects were deliberately approved of, and unanimously recommended by the authorities in Bombay. They satisfied the Railway Board of Directors in London, and were favorably received by the Hon'ble Court; but just at this juncture that unfortunate memorandum, which Colonel Kennedy gratuitously interposed in the proceedings, made its appearance, and, being submitted to the Governor General, turned the attention of all those, who were interested in our Bombay Railways, towards the opinions of that high authority. In April 1853, Lord Dalhousie's masterly Minute issued from the Council Chamber of Fort William, and unwilling as we are to qualify the general and well-deserved admiration of its comprehensive views, its sound and enlightened policy, and its lucid and forcible style, we cannot, with due regard to local interests, refrain from expressing our conviction, that it was not as successful in its bearing upon the Railways of the Bombay Presidency, as it unquestionably was in other respects.

The unanimous voice of the country had loudly called for the construction of the Khandesh Line, and had even adopted a tone of censure in consequence of the delay, which had been already suffered to elapse. The Railway, which had been projected, was approved of by the Bombay Government and Major Crawford, their able professional adviser, who had by dint of careful study mastered the details of the question; it was adopted willingly upon its commercial merits by that Company, at whose risk it was proposed to be constructed, and might by a resolute policy have by this time far advanced towards completion; yet at the intervention of a Bengal Officer, who had never even visited the line of country under consideration, the Governor General decided at the cost of most serious delay, that investigations should be resumed, not only at the Thul, but at the Bhore

Ghaut also. That this course was pursued upon the grounds of his Lordship's own misgivings about the Ghaut ascents, cannot for a moment be doubted, when it is considered, that, in his Minute, Colonel Kennedy's extraordinary method for surmounting them, and the code of mistaken principles, which he took upon himself to recommend to the Honorable Court for the regulation of the Indian Railway system, were, with scarcely an exception, deliberately discarded. While, therefore, we condemn the delay, from which the commercial interests of Bombay are now suffering, we can only regret, that our Railways had not the good fortune to lie within scope of the personal supervision of the Governor General. Could he have been aware of the thorough manner in which the question had been studied, or known at what immense labor the difficult and hack-breaking ground of the Ghauts had been reduced to lines and figures, we feel sure that he would have gone with us in our progress with that degree of confidence, which led us long since to regard the Thul Ghaut line as a *fait accompli*.

It is incontrovertible, that the slow progress of our railways is due, in the first instance, to the stupendous physical difficulty which has had to be contended with, and, subsequently, to the long period which the Indian Government have allowed to transpire, before they have come to a decision upon those lines, by which it shall be surmounted. The lingering suspense which we have endured since the end of 1852, and which has already nearly worn out the patience of our merchants and the British cotton markets, we owe to the counsels of the Governor General, and in reviewing the reasons assigned in his celebrated Minute, for resuming investigations instead of progressing with the construction of the Khandesh line, we certainly cannot now find sufficient justification for the course that was pursued. They were briefly as follows. 1st. That it was a grave error to have carried the railway up the Ghauts, when a valley line could have been obtained up the course of the River Taptee. 2nd. That the Thul Ghaut line was in many respects highly objectionable. 3rd. That the Malsej Ghaut line, having been condemned after a careful investigation, time would be profitably bestowed in testing the merits of the routes since selected. 4th. That the Railway Company's Engineer had himself asked for more time for investigation.

The first objection has, we think, been successfully answered by the recently published Reports of the Chief Engineers of the two Companies. In stating the second cause, the Minute particularly enlarged upon the Thul Ghaut Incline as a most objectionable feature. We, of course, are not prepared to deny that it is so, beyond all precedent; but yet, we think, that Lord Dalhousie took too severe a view of its defects. In the first instance, his Lordship appears to have

lost sight of the fact, that, either regarded as a National Indian Trunk Line, or considered with reference to the actual movements of existing traffic, the fall or favorable inclination of the Ghaut plane would be in the direction of the Exports, which constitute the great bulk of it. Again, he pressed rather hardly upon the inefficiency of Locomotive and Break Power for working it safely and conveniently, and aggravated the objections in this respect by fastening upon the design the defects of the Atmospheric System, which had never been contemplated as an essential appliance. The Minute transferred several abstract engineering questions to English railway authorities; surely this, in which public interests were so greatly concerned, might have been dealt with in a similar manner. If that had been the case, it may be fairly assumed, that the opinion which Mr. Stephenson has since recorded, would have been fully confirmed, and the Thul Ghaut Incline have been regarded as capable of being worked efficiently by locomotive and ordinary break power.

In the next reason for delay it was argued from analogy, that because an error had been found in the Malsej Ghaut scheme, the Khandesh Line via the Thul Ghaut ought not to be adopted without a further test. Sound as this proposition may appear, yet a consideration of the facts of the case would seem to us to point to a different conclusion. The Malsej Ghaut project had been designed and elaborated by a few enterprising individuals at the cost of a subscribed fund. Their pecuniary means were limited, and their engineering officers were not sufficiently numerous to cope with the great physical difficulties of the Ghaut Range. When the Great Indian Peninsular Railway Company had been incorporated, an ample staff of Engineers was employed; the defects of the Malsej Ghaut discovered, and after two years of laborious operations upon the Ghauts, the two lines towards Khandesh and Poona were laid out, and passed with approbation through every ordeal to which they were submitted, save the judgment of the Governor General. If an analogy were to be drawn from these circumstances, we think that it should justly have stood as follows: The Railway Company's Engineers, having succeeded in preventing the construction of a line economically impracticable, which the Government had sanctioned, were entitled to full confidence in those designs, which, after great labor and exposure, they recommended should be substituted for it.

We cannot reconcile the last reason for delay, namely, that the Railway Company's Engineer had himself asked for more time, with the official proceedings of the Railway Company; for in September 1852, their Engineer reported in favorable and decided terms upon the eligibility of the Thul and Bhore Ghaut lines, and the Company adopted his projects. It is perfectly true that he guarded himself

against finality in the details of the two most difficult sections of railway, upon the actual laying out of which only a few months had been spent, but no doubt whatever was conveyed, as to the general merits of the two Ghaut ascents, which he had selected. The time that has been since devoted to the study of the Ghaut Inclines has led to very considerable improvements, and we are not at all disposed to call in question the wisdom and foresight of the Governor General in having allowed it to be thus spent, but we do think, that the two routes having been chosen after a patient and careful investigation of two years, both the Poona and Khandesh lines might have been pushed on in 1853, with all possible speed, both above and below the Ghauts, even though the Inclines had been left for a more minute and elaborate study. That the Marquis of Dalhousie should, in the year 1853, have attached so little weight to the unanimity of opinion in Bombay respecting the eligibility of the Khandesh and Poona lines, is quite unintelligible to us, because that unanimity has since constituted in a great measure the grounds of the sanction which he has recently accorded to the construction of a Railway from Bombay to Ahmedabad.

Among all the vast projects that were suggested in Col. Kennedy's Memorandum for covering India with a net-work of railways, two only were chosen for investigation, and in September 1853, by the advice of Lord Dalhousie, the Bombay, Baroda and Central India Railway Company were entrusted by the Court of Directors with surveys of lines from Bombay via Surat to Agra, and from Surat up the Taptee Valley to Khandesh. At the same time authority was given to the Great Indian Peninsular Railway Company to extend the Experimental Line to the Thul Ghaut Road at the village of Wasind, and in the direction of Poorah to Navel, a village at the foot of the Matheran Hill and 20 miles distant from Calhan. They were also requested to lay out and survey an extension of the Thul Ghaut line to Oomrawuttee and Nagpore for the accommodation of the Cotton Trade, and to Allahabad or Mirzapore for effecting a junction with the East Indian Railway, and thus completing the trans-peninsular communication between Bombay and Calcutta. A further survey was required from them of a line from Poona to Sholapore, and thence southwards to the River Krishna, the boundary of the Bombay Presidency, where it would unite with the Madras line.

The operations of the Bombay Baroda and Central India Railway Company have resulted in the adoption of their line from Bombay to Ahmedabad. The extension of the Thul Ghaut line to Jubbulpore (607 miles from Bombay) has been surveyed and reported upon. The selection between the Thul and the Taptee Valley routes has been submitted to Government, and is under their consideration

By the publication of the Reports of the two professional advocates, and from the proceedings which have been taken with exemplary public spirit by the Bombay Chamber of Commerce and the Bombay Association, the merits of this question have been so generally made known and the decision of Government is likely so soon to be given, that it would be needless and ill-timed for us to enter fully upon the discussion; but a plain and condensed statement of the leading facts connected with the subject at issue, would appear to us to present a clear and simple solution.

Two highly important and useful lines of Railway have been projected;—one to Khandesh and Mirzapore; the other to Baroda, Ahmedabad, and Delhi. They diverge from a common terminus, Bombay, and are separated by a tract of country as large as Great Britain. The construction of the latter as far as Ahmedabad has we believe been already sanctioned by the Indian Government, and although serious doubts upon its economical and engineering merits are entertained, it has been admitted by commercial men to present considerable advantages by connecting Guzerat with the port of Bombay. The adoption of the former, and not the less valuable, has however been long deferred, in order that the merits of an alternative route from Bombay, viâ Surat and the River Taptee, to Khandesh might be investigated. This has now been completed, and it is evident from the Reports of Major Crawford, Colonel Kennedy, and Mr. Berkley, that the direct Ghaut line possesses a marked superiority. The bare fact of the Taptee line lengthening by 130 miles the transit for all traffic between Bombay and Calcutta, and the rich intervening districts, should alone be decisive of the question. But the advantages of the Ghaut line are not confined to that; the cost of its construction would be very considerably less; it would admit of goods being conveyed more cheaply and expeditiously from the producing districts to the port; would be sooner completed, and would afford greater local accommodation. If these points be conceded, and they certainly are not controverted by any reasonable exposition of facts, can there any longer be the least shadow of a doubt as to the propriety, nay, the urgent necessity for immediately sanctioning the Thul Ghaut line, and prosecuting its construction by all the means and with all the energy which the Government and the Railway Company can command? We might then hope to see the two great lines to Delhi and to Mirzapore developing the full extent of their public advantages, by the projection of all such useful branches as they may be capable of affording to the enormous districts they will traverse.

Some general observations upon the course of these transactions occur to us as having an important bearing, not only upon one of the

chief lines of railway in this Presidency, but also upon the routine by which railway investigations are to be regulated. The *Khandesh* line was got up very nearly in accordance with English precedents. The plans and sections, although not strictly adhering to those directions, which the British Parliament thought necessary for the proper representation of a railway project, were prepared so far upon that model as it was applicable to the circumstances of this country. Detailed estimates were framed, traffic returns taken with great care, and the undertaking was submitted to the authorities in such a form, as to enable them to judge, not only of its engineering, but its commercial merits also. Of that line the Governor General wrote as follows in his minute :

"The report of the railway engineer confirmed by that of the superintending engineer appears to me to establish the great commercial importance of opening as soon as possible a channel for trade into the table lands above the Ghauts. The practicability of it is established. Its remunerativeness seems at least to be highly probable."

Yet it was set aside for further investigation !

On the other hand, it has been clearly shewn, that the studies of the *Bombay and Agra and Taptée Valley* lines were presented to Government in a very imperfect state; no useful estimate was given, nor a correct return of traffic made out; there was merely a comparative mileage estimate of a line, constructed of various kinds of materials, and the only traffic return was a statement of the value of the Import and Export Trade at each of the ports in Guzerat during the year 1852-53. Yet this line from Bombay to Ahmedabad has been selected for a guarantee ! The only ground of the apparent inconsistency of these proceedings is, that the Governor General has pronounced the former to be mainly a commercial line possessing local advantages, while the latter is a political line of imperial necessity. The points therefore which are not now clear to us are: whether in choosing political or imperial lines, the commercial and engineering merits are to be deemed of secondary consideration; whether in commercial lines delay is to be comparatively unimportant; and whether in the designs of future railways, local, commercial, or imperial, the work is to be done in a complete or superficial manner.

The prudence of selecting a railway upon the ground of imperial or political necessity will ere long be tested, when accurate surveys shall have been made of the line from Bombay to Ahmedabad, where the difficulties of the country are known to be extremely formidable. There is no royal road to railway making, and although we think this railway would be of great public value, its establishment must inevitably, sooner or later, be brought to the engineering test of the extent and character of the works, and to the commercial test of its cost,



and the time required for construction. Imperial funds and patience have their definite bounds, as well as the resources of private enterprise. With respect to the mode of preparing designs, let delay be avoided by all means, and let not valuable exertions be bestowed upon frivolous and useless details, but no one knows better than the nobleman who now presides over the destinies of India, that the Standing Orders of the British Parliament were not devised for the purpose of embarrassing railway companies, but to guard the public from wasteful expenditure in ill-considered or extravagant undertakings ; to secure the public safety and for the protection of the vested interests of the country. We do not advocate the adoption of the standing orders in their integrity, for many of them are quite inapplicable or unnecessary in India, but the observance of some of their conditions is indispensable, or the Government may find these public works impaired by serious errors, and the enterprise of the companies, who undertake them, may terminate in loss and disappointment.

However earnest may be our zeal in the cause of local improvements, or bitter our disappointment at the improvident delay that has occurred in effecting them, let us not be understood to attempt to detract from the Marquis of Dalhousie's sterling merits as a benefactor of India. We feel sure that the Governor General is too sound and liberal a statesman to wish his ways to be inscrutable, and that the comments which we have taken leave to make upon his Lordship's views and decisions regarding the railways of Western India, will no where meet with a less favorable reception because they have been freely and honestly expressed.

The Railway from Callian to the Thal Ghaut Road (17 miles) will probably be finished in May next, and the 20 miles towards Poona are to be completed before the end of the year. The speedy construction of the Bhore Ghaut line to Poonah was sanctioned in the month of October last, and 18 miles of it to the foot of the Bhore Ghaut will probably be opened next spring. The surveys to Sholapore and the River Krishna are finished, and it may reasonably be expected that operations will soon be commenced along that line of country.

The aggregate of the railways under this Presidency, which either have been or remain to be surveyed by order of the Indian Government, is as follows :—

|                                   |     |       |
|-----------------------------------|-----|-------|
| Bombay to Mirzapore.....          | 845 | Miles |
| Naseerabad to Nagpore.....        | 251 | "     |
| Bombay to Delhi.....              | 930 | "     |
| Callian to the River Krishna..... | 857 | "     |
| Asserghur to Agra.....            | 536 | "     |
| Surat to Julgaon.....             | 200 | "     |
| Baroda to Agra.....               | 550 | "     |

Total 3,068 ..

We fear that we have already wearied our readers with the details of a dry and prosaic subject, but our treatment of it would be incomplete, were we to exclude all particulars of the great feature of Western India, as it will affect its railways, and we shall therefore briefly describe the two Ghaut ascents in the present state of the railway designs.

The Thul Ghaut Incline is  $6\frac{1}{2}$  miles long, and the steepest gradient, of which  $5\frac{1}{2}$  miles of it consist, is 1 in 37 ; the total ascent is 869 feet ; the speed at which upward passenger trains are estimated by the engineer to run is 10 miles an hour, and the downward trains 15 miles. The upward transit of the Ghaut will be effected in 55 minutes, including stoppages, and the downward journey in 35 minutes. Its mileage cost has been valued at £40,000, which exceeds the average mileage cost of English railways by only £5000.

The Bhoze Ghaut Incline is  $14\frac{1}{2}$  miles long, and its total ascent 1796 feet ; the gradients vary from 1 in 75 to 1 in 38, that of the *Lucky* Incline plane upon the Birmingham and Gloucester Line being 1 in 37. Its cost has been estimated at £42,000 a mile, or £7,000 more than the average of English lines, and it is probable that its construction will occupy a period of from 4 to 5 years.

Formidable as these features upon two of our main lines of railway undoubtedly are, let us remember that by their means a rapid, direct, and convenient communication will be opened between the two plains of Western India, and that the producing districts of the interior of the continent will be connected with this Port with such economy and despatch, as to place them in favorable competition with foreign countries in the principal markets of the world. Who that has travelled to Poona, or dragged his slow and wearisome way up the Bombay and Agra road—who that remembers the denunciation of the Ghauts as an insuperable impediment to railways, will not now rejoice, that ere long the ladies of Bombay ~~may~~ take their crochet work or novel, and wile away an easy and luxurious journey of a few hours to Poona, and pass, if they will, unconsciously, the great barrier of the country.

The system upon which the establishment of Indian railways has been arranged, consists of (1) a Government guarantee as the means of raising the requisite capital ; (2) the Agency of Incorporated Companies to design and execute them ; and (3). Government Supervision to control the proceedings and expenditure.

We do not like the principle ; its first element seems to us to encourage the evil, which the last is intended to obviate. With all its faults, however, it possesses the merit of expediency, by which the policy of the present age has been so generally regulated. Capital,

which it would otherwise be difficult to raise, may be freely subscribed upon the security of a Government guarantee ; but funds, thus levied, would be liable to be less cautiously expended, if a check were not provided by a power of control, vested in the guaranteeing party. So long, therefore, as the money, that is needed for public works of primary and urgent importance to this country, can only be obtained under a guarantee, it is certainly a liberal and wise policy on the part of the East India Company, to grant those concessions, and an expedient course for Railway Companies to undertake the enterprise upon such terms.

No more substantial proof could have been given by the Government of their determination to bestow upon the Indian Empire the inestimable benefits of the railway system, than this pledge of so large a portion of its revenue ; no better prospect of the ultimate free investment of private capital could be presented, than the willingness of the existing Companies to enter upon the speculation under this protection.

That the Indian Government has made a safe bargain,—nay, even secured the best of it, but few can doubt, who have well considered the terms of the agreement. The Government have bound themselves to the payment of 5 per cent interest upon the capital expended, and have undertaken to provide the requisite land. On the other hand, they have vested in themselves unlimited power over the proceedings and expenditure of the Railway Companies ; they have provided for the cheap conveyance of their mails, troops and stores at certain low prescribed rates ; they have obtained a reversionary interest in the success of the undertakings, by having arranged, that all payments under the guarantee shall be eventually reimbursed to them out of the surplus dividends above 5 per cent. In addition to these advantages, they must inevitably derive from the development of the railway system a great amount of State economy and a vast increase in their revenue.

The railway companies, who constitute the other party to the agreement, have effectually enabled themselves to fill their subscription lists ; and they have obtained all the land they require, free of cost. But they have given up their independence of action, and have pledged a portion of their income to pay off the advances, by which their undertakings were initiated. The success of Indian railways can alone disturb the exceptional policy upon which they have been founded, and as we are sanguine of its realization, we have no doubt, that ere long railway enterprise will have established a firm footing in this country, and, when peace shall have restored activity and speculation to the monetary world, will rapidly make way without the helping hand of a fostering and liberal Government.

It will be a day of good omen for India, when railways are pushed forward upon their own merits by private capitalists and an unfettered English management. It has been the fashion with some of our Indian authors on railway subjects to denounce English practice as extravagant and objectionable; with pharisaic pride to imagine, that we are not as they were, but are to correct their errors and eclipse their triumphs. These oriental writers are not genuine iconoclasts, for, though they condemn the works of others, they set up their own desperate nostrums for excelling them. Their criticism is harmless, for it is caricatured by their designs. What, for instance, could be more impractical, nay absurd, than Colonel Grant's design for constructing railways in the Bombay Presidency upon continuous viaducts, stretching over hill and dale? Unless it were Colonel Cotton's conception of perching them upon screw piles, and, of all reasons in the world, for the sake of economy! While Colonel Kennedy's Alternative Impulsive Planes—his 95 miles Ghaut ascent,—1 in 2000 ruling gradient—4 to 1 slopes—obligatory points, and a whole chapter of other eccentricities, have become a standing joke. It will be a jubilee for this country, when we can justly boast of the boldness and talent of such men as Stephenson and Brunel; when the same powers of design and execution shall have surmounted the difficulties of this country, as have thrown down the physical barriers of England; when India will furnish us with the vast and varied materials and appliances which England has so profusely poured upon her public works; when a powerful body of contractors shall have freely embarked their wealth and labors in our enterprise, and when capital shall have bestowed its plenitude upon the accomplishment of these great undertakings;—then indeed may we look with complacency upon our achievements, and Indian critics may if they please find fault with that practice, from which nearly all our precedents and much of our power were derived. Could we follow England's example and apply but half the measure of her *elan*, experience, and inventive and material resources without restriction to our Indian railways, we might complete them years sooner than we shall do upon the present system.

Under any circumstances the Government has a safe stake in its present venture. If railways ultimately succeed, it will fully enjoy the best of their results in a diminished expenditure, a greatly augmented revenue, and the triumph of a wise administration. While, in the event of the system disappointing general expectations, the Indian Government must obtain great gains at the expense of a limited portion of its revenue. A Madras officer has, we think, in his late pamphlet upon Colonel Cotton's work, fallen into some misconception as to the position which Government now occupies in

the public mind with respect to these undertakings. He would have it to be understood, that railways are regarded by the people of India as the operations of the Government, and not the work of the public Companies who have embarked in them. We do not presume to judge of what may be the state of affairs in that Presidency, but here it is far otherwise, and it seems to us to stand to reason, that it should be so. The projects are entirely designed by the Railway Company; all orders proceed from them; all contracts are made by them; their officers superintend the operations, and all payments are made by their drafts. It is impossible to imagine, that the astute people of this country could fail to discern, who are the actual purchasers of their commodities, the employers of their labor, and the executors of the great public works, which now command universal notice. While the share lists of the Companies comprise, as now, the names of very few native capitalists, it is unreasonable to suppose, that the guarantee can, in the face of the above facts, obtain for railways the character of Government undertakings.

The direction under the existing system is of such a complex character, as to involve considerable delay and an unusual quantity of official labor. There never was so Briareus-headed a concern as an Indian railway. There is first the local Committee of Railway Directors, or the Managing Director; then the London Board; then the Bombay Government; the Supreme Government; the Hon'ble Court of Directors, and the Board of Trade.

Among so many authorities difference of opinion is certain to arise, and when discussion and correspondence begin, it must be long ere unanimity prevail; the more important the subject, the greater is the delay. The vast amount of official labor that has to be gone through in the ordinary routine, upon which the system operates, may be conceived from the following facts:—It is customary in Bombay to issue from the Railway Office on all ordinary matters three copies of correspondence, drawings, and engineering and legal documents, and four copies upon all important affairs, besides those which are required for the internal economy of each department. In addition to these three, copies are also despatched from the Secretariate.

With such complicated machinery it surely behoves all departments to curtail and simplify their proceedings to the greatest extent, compatible with the proper and expeditious transaction of business. Under the best of routines all official proceedings would here move more slowly than the working of similar undertakings at Home; while under such regulations, as characterise the usual practice of Bombay, its progress must be most dilatory. We would not imply

by this, that the present system does not promote the establishment of Railways. On the contrary, so long as a Government guarantee is indispensable for raising capital, it is obvious, that, with a Government supervision, some of the impediments which retard progress are a necessary evil.

During the construction of the Experimental Line in this Presidency, supervision was exercised with the greatest minuteness ; nor are we disposed to raise a complaint on that ground. The practice was entirely new to the controlling authorities ; they had to acquire experience ; to satisfy themselves of the capabilities of the agents employed by the Railway Company ; to store up precedents for future guidance, and to note many details and accessories, which, except during the experiment, might have been unheeded. Our railway has now passed through this ordeal, as well as ten tedious years of investigation, and the Supreme Government has recorded its decision, that the practicability of constructing railways in India needs no further experiment for its establishment, but that railways are to be undertaken upon a scale proportional to the extent of the British Dominions in the East and the immediate benefits they are calculated to produce. An enlightened Government, sensible of those advantages, ought therefore to attach its full value to despatch in all their proceedings. It may be perfectly true, that they have to guard the public from loss and extravagance ; but even in the attainment of that important object, delay must frequently impair economy, and whenever measures are adopted for controlling the expenditure of a Company, care at least should be taken, that the time wasted upon enquiry do not cancel its benefits.

We could mention many authentic instances of an utter sacrifice of time in the Government transactions upon the Experimental Line, and shall only refrain from doing so, because our views on this subject do not need the force of illustration to sustain them. Important as it may be to support an established system by the observance of its regulations, even to trivial minuteness, and although such proceedings as those, to which we allude, might strictly accord with the prescribed routine, yet they surely ought not to be henceforth tolerated in connection with railways, in which private capital has been embarked, and the essential merits of which are to facilitate labor and economise time ! We hope that the supervising Government will now resolve to exercise control with due regard to the magnitude of the undertakings and the importance of their speedy completion. Having adopted with becoming spirit the policy of our Railway Governor General, they will, we trust, guard its development by a wise and progressive administration. If they use their powers with judgment and promptitude, they may do

much to promote the success of the enterprise, but by fettering with needless restrictions the energy and experience of powerful Companies, who are impelled to rapid progress by their own interests, or by impeding their operations by a dilatory procedure and bootless interference in details, they may yet waste many more years over the construction of those important lines, upon which the future prosperity of this country mainly depends.

Railways in Western India are a topic upon which it were easy to dilate, but we have already transgressed our limits. We lay down our pen with the consciousness of having treated the subject in a very imperfect manner, and shall certainly return to it on a future occasion. In the mean time may their progress be rapid and triumphant! A golden age is, we firmly believe, dawning upon this country, and to the Marquis of Dalhousie will belong the honor of its inauguration. It may, or may not, be his Lordship's fortune to render more distinguished services to the State, but when the Railway System shall have fulfilled its destiny in India, he will by its bold introduction alone have won for himself a red letter page in the annals of this magnificent Empire.

## ART. IV.—NEWTON AND HIS PREDECESSORS.

*The History of Physical Astronomy, from the earliest ages to the middle of the 19th Century, comprehending a detailed account of the Establishment of the Theory of Gravitation by Newton; and its Deveopement by his Successors; with an exposition of the progress of Research on all other subjects of Celestial Physics.* By ROBERT GRANT, F.R.A.S.—8vo. London : Baldwin, 1852.

“An old tale, and often told,” is that of Newton and the Apple, and older yet will it be, and still oftener related, as the ages onward roll, for it tells of the most wonderful, the most universal of nature's laws ;—of that which keeps the stars in their courses, and the earth in her orbit ; of that which gives alternate day and night, and the sweet seasons' change ; of that which holds the mountains in their masses, and fills the depths of the sea, bidding the gentle moon to sleep softly on its waters, and illumining the darkened earth ; which brings the projected ball again into the tiny hands of the little child, and maintains the vast solar orb in the centre of his dependant spheres.

Although many an apple has fallen to the ground, and many men, women, and children have seen it, by Newton only was its grand teaching discovered ; to Newton only it told its wonderful history, and to the utmost verge of time, so long as a single dew-drop's miniature globe is rolled upon a leaf and the inhabitants of earth move in happiness upon her surface, so long will this tale of Newton and the Apple be related to admiring listeners.

To him of small mind are the small things of Nature insignificant, speaking but to the outward man, having no voice for the mental ear, no suggestion for the working intellect. Not so to the Philosopher ; to him is nothing common or insignificant which bears the stamp of his Maker's hand. The smallest, the meanest of Nature's works, the tiniest blade of grass in the depths of the forest, the smallest of the insect tribes which inhabit its green borders, is in itself a world of wonder and beauty ; a work as infinitely beyond his power to create, as to conjecture ; beyond his deepest wisdom to plan ; obeying laws which, grand in their beautiful simplicity, pervade Nature, and rule in the minutest as well as in the largest of her works.—“The meanest of creation bringeth in a tribute of the beautiful.”\* “The patent mark of beauty, its Maker's name imprest. For the great Creator's seal is set on all his works.”



Wonderfully simple are the laws of Nature ; in her there is no waste, no superfluous power ; the eye of Omniscience can discern how much will be exactly sufficient, which will be the best possible arrangement, which is capable of an universal application, of becoming a pervading law. Thus we see in all His works a wonderful simplicity and unity, as proceeding from the one mind, the all-perfect. One law discovered, is the key to thousands of mysteries, and opens many a hidden treasure, bearing a resemblance through endless forms of variety.

"How unlike, the complex works of Man !"

To the devout student of Nature therefore, nothing is trifling ; all is deeply significant ; the more he acquaints himself with her workings, the more he perceives the universality of her grand laws, "the omniscient, omnipotent hand of her Artificer : for he, who has watched and traced the mighty agents of Omnipotence in grandest forms, recognises again the same power, in the gauzy wing of the insect glittering in the sunbeam, and in the light ~~thrust~~ down floating on the summer air." He sees that these obey the universal laws equally with the most astounding of nature's effects ; parts of the great whole requiring nothing short of omnipotence to uphold them, whispering such wonderful things of their governing laws ; whispering to him who can read their occult language. The flight of birds, the waving of every tree branch, the form of each little ripple in the silver sand of the sea, sound, in his intelligent ear, notes (unheard by duller organs) which lead to the full chorus, and chime in with the deep harmonies of the universe.

"For Beauty hideth everywhere, that Reason's child may seek her."

Amidst the various departments of Art, or Literature, or Science, among the many who follow the study, there has usually been found one who stands pre-eminent ; one master-spirit, who surpasses all his fellows in whatever age or country ; one brilliant star, which rises to a higher elevation, and shines through the ages, unapproached by any other, defying (as it were) time and space ; unequalled previously, unsurpassed subsequently. Such was old Homer, grand in mighty epic, standing alone sublime in solitary grandeur, when all around was dark, and sent forth no ray to light the future ages. Such was the unknown sculptor of the Medicean Venus and the Belvidere Apollo, breathing in marble the spirit of ancient Greece, perfect in execution, models for all imitators. Such was Archimedes, penetrating discernor of the heart of dull matter ; framer of machines which shall carry his name of power, to assist all mechanists to the end of time. Such was Hannibal, leveller of mountains, conqueror of obstacles, a proverb for future warriors.

Such was Michael Angelo, animator of the living canvass ; grand in design, unrivalled in execution, wonderful in the field of Art. Such was our own Shakespeare, the Poet of the World, none approaching him ; the poet of universal nature, touching all subjects, and drawing out their essence with the wand of his genius. Such also was Newton, a glorious genius, reader of hidden mysteries, high in attainments, high in morals. To him, the sun and the moon uttered speech, and the stars spoke an intelligible language. His one mind furnished thought for thousands of thinkers, his discoveries penetrate through time and space, and shed light where darkness was before. One of the earth's greatest was Sir Isaac Newton.

From the earliest times, the heavenly bodies and their motions have been subjects of interest ; contemplated, with different objects, and different enlightenment, according to the degree of civilization of the time and period. Amongst the ancient shepherd kings, and the other Nomadic tribes, the stars were their charts, the sole guides of their wanderings.\* In Chaldea and old mysterious Egypt, the stars received worship, and " Canopus the beautiful " was wrapped in the fanciful poetry of Eastern imagination. Later in that undefined period, the Middle Ages, when learning, passing away from her ancient throne in the East, was travelling through clouds and darkness, (rendered yet denser by the shadow of Rome) over the lands of Western Europe, when she was enclosed in dungeons, confined in the cells of monks, and never allowed to see the free light of day ; never held up in all her integrity to the gaze, the study, the information of the vulgar, but let out in small, niggard, deformed portions, misleading rather than enlightening ; then was the glorious study of the stars of Heaven perverted to abject superstition, and degraded. The natural effects of mighty causes were used by designing men to enslave the popular mind ; their pure light was turned into darkness, and under the name of Astrology, the movements of the vast orbs of the solar system were interpreted to regulate and predict the petty affairs, the little doings, and mean passions of individual men. And this machinery, dressed in the flowery robes of fancy mingled with superstitious mystery, and charged with the knowledge of the future, (the forbidden lore, so coveted by all the sons of Adam !) was made very attractive to the vulgar, and held in high esteem. Based too on religion (however false) it had great power over men—

" Power, on an ancient consecrated throne,  
Strong in possession, founded on old custom.  
Power, by a thousand tough and stringy roots,  
Fixed to the people's pious nursery faith."

The human mind, especially the uneducated, undisciplined human mind, that which has no *firm, fixed principles* of religion or of science, with which to *test* truth and *try* the new ideas it receives, is very prone to superstition, "delightedly believes divinities." Man has a certain desire to account for whatever he sees, and to the untutored intellect, in which (in spite of the logical tendency to trace effects to their causes) imagination holds uncontrolled sway, superstition is an easy way of doing so. And jeer at their believers as we may, such a hold have these old astrological superstitions (instilled, in the early, credulous ages of the world) on the general faith, that

" Still  
Doth the old instinct bring back the old names,  
And even at *this day*  
'Tis Jupiter who brings whate'er is great,  
And Venus, who brings everything that's fair!"

Out of this "double night of ages, and of Rome," Learning began to rise and shake off her shackles—they had been forged with too heavy chains to be longer endured—and at Eisleben, an obscure village of Lower Saxony, in the year A.D. 1483, a young child was born and destined by his parents for the priesthood of Rome, but destined by the beneficent Parent of all for a higher, purer priesthood, the priesthood of the unvarnished truth, the priesthood of the Most Highest; and that child was Martin Luther.

Profound in learning, powerful in eloquence, and more powerful still in the divine spirit, which animated him, he struck at the Goliath of superstition, and burst the bonds which fettered the nations, dispersed the heavy clouds of darkness, and opened the way to admit the light of Heaven. Ignorance, attacked in her strongest hold, began to falter, and one by one, other stars ruled in the firmament, dispersing the gloom.

But Luther led the way, with his torch kindled at the fountain of light.

It is a somewhat curious and a very interesting fact, that this opening through the clouds of darkness, which from Rome, their centre, spread over the whole of Europe, was after this never closed. With the imprisonment of religious truth, and freedom of thought and conscience, was incarcerated all other truth, all other learning, all other mental liberty. After the breach made by Luther in the strong walls of the prison-house, men's minds were, to a certain extent, let free on all other subjects, especially on science. And though it was long before the old bolts of bondage were thoroughly riven; and though men long felt themselves under mental and moral restraint, and civil and religious liberty cost many a revolution and many a pang in struggling into birth, yet the breach once made

was never afterwards closed, and many were the great men and grand the discoveries that followed, and dared to be free. And thus, from the time of Luther, and Copernicus, down to the days of our own Newton, there has not been wanting one to sit upon the throne of glorious Astronomical Science, and carry on the war with ignorance, assailed though most of them were by the many forms of mental and spiritual error. And this interesting fact we shall presently trace, shewing that each great discoverer, or worker, in his turn, did his own part, and laid his own stone, some of larger, some of smaller dimensions, but each equally necessary to the general progress, on the great edifice of Astronomical Science; and that as one paid the debt of nature and was laid in the dust, another rose to fill his place, and carry on the great work.

Contemporary (as we before said) with Luther, flourished the celebrated Copernicus, who, breaking through previous false notions (which though unsatisfactory to thinking minds had not as yet been superseded by truer views) dared to put aside all former systems. He studied those of his predecessors, the Egyptian sages, and that of Ptolemy, which place our earth in the centre of the planetary sphere. The more he studied the more he found defective in them; more especially did he doubt the supposed fact of the central position of the earth.

The notion of Martianus Capella, who imagined the sun between Mars and the Moon, and Mercury and Venus revolving round him, as their centre; also the speculation of Apollonius Pergacus, which supposed that the earth held the centre of the universe, whilst the moon, and the sun with all his circling planets revolved round the earth, attracted his attention but did not satisfy his reason. And thirty years' study brought him (spite of all previous Astronomers) to the daring conclusion, that the *Sun was stationary*, in the centre of the system, and that the earth revolved round him, with the other planets, between the orbits of Venus and Mars.

Tender was he of his wonderful discovery, fearful of the rough usage it was likely to meet with, from the hands of bigotry and ignorance; for well he knew as all discoverers have painfully experienced, that

“Time consecrates,

“And what is grey with age becomes religion.”

Gently, cautiously, he whispered the result of his thirty years' labors, confiding it to one or two; teaching it by oral lectures, preparing the darkened public for this dawn of a brighter light; and it was not until eleven years afterwards, namely in 1541, that his immortal work on “the Revolutions of the Heavenly Bodies,” was published with his own name. It was well received, being printed at the

expense of the Cardinal Schöenburg in 1543, and this was the extent of the triumph which the great man was permitted to enjoy. He lived not to peruse it. A complete copy was placed in his hands on his deathbed. The flag of victory just touched his brow, and he expired a few hours afterwards.

*Tycho Brahe* was the next astronomer of note, still groping through the clouds of darkened ages. His more limited mind was unable to grasp these grand ideas, and he rejected the system of Copernicus. Nevertheless, useful in his walk of valuable investigation, he enriched the science of Astronomy with observations, gained an European fame, suffered from the ingratitude of his own country, and died at the age of 55, leaving observations on the variations of the moon's motion and other irregularities, for minds of deeper calibre to account for. Before he died, he met with the celebrated *Kepler*. Thus these great men followed closely upon one another. Truly it seemed that Luther, breaking the thundercloud, gave light, life, and energy to the freed human mind.

How the Planets moved in their viewless orbits, suspended in measureless space, true to their departure and return, none as yet knew, none had even formed a plausible conjecture.

*Kepler* was born in 1571. His mind, the very reverse of that of his deceased friend, was doomed to lay a different stone upon the astronomical edifice. He was never satisfied with bare facts, but, restless in the pursuit of hidden causes, eagerly made use of the materials and observations collected by others, and never ceased working till he had reduced them to their place in a reasonable system. Amongst others those of *Tycho Brahe* were eminently useful and nobly acknowledged.

The mind of *Tycho Brahe* was just the very one most desirable as the predecessor of such as *Kepler's*, which was full of conjecture and imaginative speculation. The collector of facts should be unimaginative, untrammelled by fear, lest the discovery of some new and troublesome fact should disturb a favorite theory, or overthrow a preconceived idea. His mind should be cool, clear, earnest in the amassing of data, independently of any result to which they may lead. Such a mind was that of *Tycho Brahe*, the forerunner, the caterer for the more genius-like, the more excursive, the more interesting one of *Kepler*; spinning with patient care the thread which his successor was to weave into a finer web. The errors of the more inventive kind of mind were exhibited in *Kepler's* early career. He was led into various absurdities. At one time he attempted to solve the problem of the regular motions of the planets by the conjecture that they were animated! And in 1596 he published a work of his own peculiar views, entitled "The Harmonies

and Analogies of Nature," to which his more matter-of-fact friend attached no value; but strongly advised him, in the words of true Philosophy, "first to lay a solid foundation for his views by actual observation, and then, by ascending from this, to strive to reach the causes of things."

He took the practical man's advice, and in 1609 published "Commentaries on the motions of the planet Mars, as deduced from the observations of Tycho Brahe," refuting his former errors, and laying down two grand laws, the first ever made in Physical Astronomy—the one being, the ellipticity of the orbit of Mars, the sun being in one of the foci; the other, the measurement of that planet's orbit, by comparing together the times in which Mars passed over different portions of his orbit—finding that "they were to one another as the areas described by the lines drawn from the centre of the Planet to the centre of the sun; or in scientific phrase, the radius vector describes equal areas in equal times." The other great discovery which was held back some two months, and nearly abandoned at the eve of completion, from an error of calculation into which his too eager impatient disposition led him was, that "the squares of the periodic times of any two planets, are to one another as the cubes of their distances from the sun."

The work in which these memorable discoveries were divulged to the public, was dedicated, under the title of "The Harmony of the World," to James the First of England, well known for his love of learning and learned men, especially for students of Astronomy, Astrology, Mathematics and the occult sciences,—subjects, in that age of superstition, strangely intermingled, even by the learned themselves—the studious monarch himself writing a work on demonology and witchcraft.

The active mind of Kepler, worn out by study, neglected by his country, allowed to chafe under the biting tooth of penury, though deserving and promised a pension equal to his wants, which he never received, was laid at rest in 1630, in the 59th year of his age—another melancholy instance of how tardy is *la pays*, in being to her "grands hommes reconnoissante"!

The collection of facts is the first natural effort not only of the infancy of the human mind but the infancy of nations, of laws, of science. But facts, like bricks and stones, have done but a small part of their duty, when they lie in unarranged heaps *in statu quo*; the building is far from completion. It is the part of the practical Astronomer to collect his facts, to relate his observations, to state the results of his watchfulness.

The student of Physical Astronomy collects these valuable details, and brings them to the test and crucible of fixed mathematical laws;

he takes not one fact, but all bodies, all powers immediately or remotely bearing upon it ; places them in his view at once ; computes their forces, their masses, their motions, and their mutual attraction? The results arrived at by the calculations, when reduced to their due place and order by mathematical science, are many, and deeply interesting, building up the Temple of Astronomy, by establishing laws from her previously ascertained data ; showing the necessary consequences of such data, not only in the past, but in the future ; correcting and throwing light on former errors, and predicting (the only science which dares do so with a semblance of truth) the events and movements of the future, not, as Astrologers would have it, the future of men and nations, but of their own vast orbs and dependencies ; their own star-lighted future.

Such is Physical Astronomy, such the study of the full mind of Kepler, such the first work ever published in this extended branch of the subject by him in 1609. Such the beautiful study which never ceases to increase its bounds, but, even though the limits of fresh discovery were arrived at, would not cease discovering. Such the noble science, requiring deep research and vast collateral learning, sought by modern times and the mind of the present age, and lately supplied, as it has never before been supplied, in the work of Mr. Grant.

The deep works of Astronomical science are far too learned for the general reader ; yet the general reader, whose calling permits him not to dive into those studies which requires a lifetime to master, still desires to know what others have done, and, if it may be, to be shewn the grand results of science, and something of the mode by which they have been arrived at ; although he is unable to follow step by step, through the deep waters of calculus and deduction, to the true conclusion. This work of Mr. Grant is accurate in scientific knowledge, yet sparing of scientific and technical terms and formulæ, extensive in its range of subject and eloquent in its style. The author is deep in research and loving in the execution of his task, in his appreciation of the dignity of the subject and its importance ; his respect for the various discoverers and sympathy for the many difficulties of strugglers, not only with science, but with the systematic opposers of truth, for their many trials of exile, poverty, neglect and imprisonment, is sincere. He is as carefully popular as his subject would permit him to be, and shews much erudition and no pedantry—a rare combination in such writers.

We would not do injustice to Mr. Grant by garbelled quotations, which could not be extracted without injury, but will content ourselves with noticing a few of the subjects treated in his eloquent and interesting work.

His title displays a miniature epitome of the whole. Accordingly Physical Astronomy occupies the beginning of the work—the condition of the planets physically considered. The interesting subject of comets and their eccentricities whether within or without our own system ; that of the optical differences, made in the apparent distances of the heavenly bodies by atmospheric refraction, diffraction, and irradiation of light leading to parallel, the mutation of the earth's axis, the precession of the equinoxes, &c. eclipses, looked at with superstition in the olden time, with wonder and admiration subsequently, and of late studied carefully by the philosophers of all Europe ; the wonderful phenomena brought to view by Lord Rosse's and other improved telescopes, throwing new light on the physical condition of the sun himself—of these Mr. Grant gives interesting descriptions, and of new and important instruments and inventions in operation at various observatories. For these we must refer the reader to his own book whilst we trace the origin of the now splendid Telescope, in its first invention and results no less interesting and important than in its recent revelations of phenomena then undreamed of.

At the time when Kepler was enlarging the bounds of thought in Prussia, Galileo Galilei was enlarging the bounds of vision at Pisa. The son of a Florentine Noble, designed for the learned profession of medicine, his natural inclination was for Geometry. He gained the professorship of Mathematics at Pisa, at the age of 25, then made enemies by rejecting the Aristotelian, and adopting the Copernican philosophy. Poor Copernicus ! His discoveries, though at first published with greater facility than his sensitive mind had dared to anticipate, were too grand, too far in advance of the rest of mankind to be adopted without opposition. Though fortunately for the son of genius, he lived not to suffer the pain of seeing his immediate successor in the field of science reject them altogether, and him, who in a distant land and subsequent time adopted the cherished children of his mental labors, incarcerated, persecuted for them and their result, almost to the death !

A report reached Galileo, that an instrument had been presented to Prince Maurice, by means of which distant objects were rendered nearer and more distinct to the eye. He immediately saw the advantage of such an instrument in astronomical science ; and from his previous knowledge of the power of lenses, he constructed his first simple telescope, by means of two spectacle glasses and a leaden tube, by which he made objects appear three times as near, and nine times as large, as to the naked eye. This was in 1609, the year of Kepler's celebrated discoveries respecting Mars. He improved his instrument by labor and study, till he produced one by which objects appeared almost a thousand times larger and more than



thirty nearer to the eye. What must have been the reward of his labors when on the first night of its use, namely on the 7th January 1618, he discovered three of the little satellites of Jupiter ! and soon after the fourth ! Apart from the delight to a mind like his of the sight of more beauty, more harmonious variety, this discovery led to important deductions. It had formerly been urged that, as the Earth was the only moon-lighted planet, she was probably the only inhabited one, and being consequently the most important, and also unlike all the rest, she was supposed to occupy the central position of the system. Now, the discovery that another, a larger Planet than the Earth was lighted by four moons, swept away the premise of the first conclusion ; and by establishing an analogy between our Planet and others, there appeared no longer any ground for insisting upon her central position.

Numerous were the discoveries made by the instrument of " Il gran Linceo " (as an Italian writer calls Galileo), and bright the light and strong the confirmation thrown by it upon the new doctrines published a century before by Copernicus. Cosmo the Second invited him to Florence, placed him in his own palace, and gave him every facility to pursue his studies. Surely, then, the philosopher was rewarded for years of labor, and struggles with dull intellects. But the lofty Galileo, with his head amidst the brilliant stars which came at his bidding and passed before his magic glass, saw not the clouds which lay at his feet. His eye was above the mists of Earth ; glorying in what he himself beheld, he never doubted that all would rejoice with him.

" But he had mistaken the disposition of his species, and the character of his age. That same system of the heavens which had been discovered by the humble ecclesiastic of Frawenberg, which had been patronised by the kindness of a bishop, and published at the expense of a Cardinal, and which the Pope himself sanctioned by the warmest reception, was, after the lapse of a hundred years, doomed to the most violent opposition as subversive of the doctrines of the Faith."

The Holy Inquisition, that deadly dungeon of all enlightenment, fastened its senseless fangs upon the gentle Galileo, and charged him with impiety for the lovely revelations of his glorious instrument, the beautiful deductions of his life of study, and the belief in the cherished discoveries of his honored predecessor. They called upon him to renounce all,—all for which he had labored, thought, and lived, and by which he hoped to live again, after his departure from this earth, in the minds of the future ; to renounce them, on penalty of being thrown into the depths of a dismal dungeon. Such was their sentence upon him, who rejoiced in light,

and to whom light revealed itself in sparkling stars ! More than once was he assailed, more than once did he promise to keep strictly within his own breast that which it was his glory to publish ; more than once did he break that enforced promise.

Long pursued by his ignorant persecutors he was attacked for the last time in 1638, and was cited to appear before the High Tribunal. Seventy years had sprinkled his venerable head with grey hairs, and he was bid to renounce as heretical his glorious belief. Poor human nature ! With sorrow be the truth related, with grief that her wisest are not always her noblest, her bravest sons ; sadly we must confess, that, pressed beyond his power of resistance, Galileo *did* “*abjure, curse, and detest*” those grand irrefragable truths, that had been entrusted to him alone of all mankind to teach his fellows. He abjured them before all men, on bended knee, his hand (seemingly attesting his sincerity) resting on the Holy Gospel of truth ; and Galileo was cast into the dungeons of the Inquisition ! How badly does this speak for the ignorant cruel Bigots ; how badly for the enlightened sage ! But though weak and a victim of oppression, terrible was the struggle between outward force and inward conviction ; he had on one occasion scarcely uttered the recantation of his discovery of the movement of the earth, when truth, in contradiction of a false act, involuntarily found its way to his lips, “*e pur sie muove*” ! and, yet it *does* move, murmured the distressed Galileo.

At the age of 73 he began to lose his eyesight. Even then he pursued diligently his studies and discoveries ; at 74 it left him entirely, but though the sight was wholly and the hearing nearly gone, his mind retained its activity. When life drew to a close, at the age of 79, he was engaged in considering and calculating the force of percussion, and on the 8th of January 1642, “the starry Galileo and his woes slept in death.”

But though Copernicus had placed the sun in the centre of the system, Kepler had given out his three great laws, and Galileo had studded the firmament with innumerable stars, much was dark, much remained in confusion. Although to many Astronomers the idea of the mutual attraction of the heavenly bodies had dawned in the first uncertain light of the rise of knowledge, it was reserved for another to bring the vague idea into the limits and order of a yet undiscovered Law. The hymn of the stars was not silent when Galileo died, another should arise to whom with lofty intellect and deep erudition was to be shewn mighty truths, which the world had for more than sixteen hundred years vainly striven to discover. They were to be shewn to him in the midst of a state of civilization, (and civilization's richest gift, freedom of thought) which, though it

were unable to rise with its great men and proceed with them immediately to the heights to which they might attain, was yet too far advanced to attempt to hold them back, and put fetters on loftier intellects than their own. His country too was one of freedom, and her religion the religion of truth.

A little more than two hundred years ago, in a small village called Woolsthorpe in Lincolnshire, near to the ancient town of Grantham, a dark procession was sweeping through the hamlet, bearing to its last earthy home the remains of old Mr. Robert Newton. The chief mourner was his son Isaac.

In the gentle heart and superior mind of Harriet Ayscough the bereaved man found consolation, and in a few months she became his wife. Poor Harriet little knew how soon she would herself need the consolation which her tenderness bestowed ! Death's invisible shadow often rests in the midst of life's brightest sunshine. A little more than a year after the first funeral procession, another slowly wended its way to the little church yard ; it bore to the grave the son of the old man, the late bridegroom, the beloved husband of Harriet Ayscough.

Turn we from the abode of death's relics, into the beautiful valley through which flows the river Witham, with its numerous fresh springs, spreading sweet sparkling fertility, and making nature's soft murmuring music through its green leaves ; cross we over to the western bank of the Witham, and having delighted our eyes with the pleasant view towards Colsterworth, let us stroll towards the pretty Manor House of Woolsthorpe. There sits the young widow in the first hours of her grief, in the old mansion of the Newtons. But a few months since she entered that house a bride :

" In the play of life,  
In the pride of love."

She now sits drooping and pale and sad.—There is something so sweet in that beautiful valley, that we would fain return to it, though the time be Christmas and the trees bare. There stands the Manor House, there sits the widow, her garb rather more worn, her expression somewhat less sad, for she has had a motive for energy. She is leaning over a little cradle, a shade of anxiety is upon her mother's brow, for the consolation, the child of the widow, the boy which his father never lived to see, is ailing ; its little pale cheek is too thin and small for health, and she dreads lest jealous Death should again rob her of her treasure. But he, though his mother knew it not, struggling long between life and death, the child of many sorrows, many cares, and many an earnest prayer, was destined to live to man's estate, and be endowed with

more than common manly strength, not of body but of mind, of character, of moral and spiritual power. He was to be the celebrated, the great, the glorious Sir Isaac Newton.

Born the very year after Galileo died, Newton, the only son of his mother and she a widow, had the advantage of excellent influence in the character of that mother, both moral and intellectual, and she gave him all the education her limited means could procure. His proficiency was early exhibited, for after some years of earnest study of the physical sciences he made discoveries in Optics on the nature and properties of light and color, in Mechanics, in Astronomy. The light and glory of Cambridge he was driven in the year of the plague, 1666, from his alma mater to take refuge in his native Woolsthorpe. There sitting alone in the old garden, where for more than a hundred years his fathers had sat, where his mother had walked as a bride, had wandered a solitary widow, and had been again wooed to a second marriage; where his own infant footsteps had strayed by the side of his one parent, he mused on the nature of gravity, and sought for the great law, which he felt must exist, which, discovered, would solve a thousand problems and would carry the name of its discoverer through all the ages.

The oft-recorded Apple fell at his feet, not dead, as it would have done at the feet of any other man, but instinct with thought and deep significance. He reflected on the power which kept all things on the Earth's surface drawn towards her centre. He extended his deductions and calculations till, step by step, he came to the conclusion, that the moon in her orbit, the planets in theirs, the sun in the centre, were held in their appointed paths by the same force that brought the rotten Apple to his feet and established the memorable, universal Law; namely, that, *every individual particle of matter in the universe attracts every other particle, with a force, directly as the mass of the attracting particle, and inversely as the squares of their distances.* And lo! the Law of Gravity was discovered! the light which was to spread to the verge of the universe, and shine to the end of time, broke upon the mind of Isaac Newton. He had unravelled the web of sixteen hundred years! Although discoveries followed in the train of this grand rule, by which the movements of the stellar world were understood, the elliptical orbits of the planets, the more eccentric paths of the comets, a theory of the wonderful ebb and flow of the tides, and other such subjects were elucidated, and in May 1687 given to the world in the most wonderful production of human genius, the "*Principia Philosophiæ*" of Newton—a work which, compared with every other work of every age or country, stands "*pre-eminent for its profound and original views, and the elegance with which they are expounded*"—yet it was nearly

half a century before they were adopted or appreciated. Thus tardy is Fame in weaving her triumphal crowns.

At the present time (about 270 years since the publication of the "*Principia*,") none doubts the beauty and genius of Newton's work, and the truth of the laws it teaches. The learned of all nations are now working out his problems and suggestions. The work he left to do, is not nearly accomplished. His one master mind furnished food for not only present but future generations of Mathematicians. His thought suggests material for all thinkers. His spirit informs all. His works incite all, and urge them forward in the path to which he pointed; the life of one man, even of such an one as Sir Isaac Newton, not having been sufficient to display a hundredth part of the wonders of the Laws he discovered and laid down, in their innumerable details.

With all these high intellectual attainments, he mingled the finest moral nature; the most beautiful self-control. Every one is acquainted with the story of the mischief done by his little dog, who, in setting fire to the successful result on paper of months of labor, received the gentle rebuke, "Oh! Flora, thou knowest not the mischief thou hast done me!"

But more than this, adding lustre to all his other gifts, was the Divine Spirit which taught him higher things than even the visible heavens could teach, and led him,

"From Nature up to Nature's God,"

gilding his declining years with the humble faith of a Christian. He is now the presiding genius of Cambridge, the idol of her students; his bust by Roubillac stands in the Library of Trinity; his telescope is venerated and kept as a relic; his memory worshipped; his haunts trod with reverence.

He still reigns in the old precincts, shedding the benign influence of wisdom and learning, a combination which forms the truly great man. Such was Sir Isaac Newton.

That vast mind, having done more to enrich the stores of human thought and learning than any mind which ever dwelt in man, retained its vigor to the last. Born on Christmas day 1642 he went to Him, whose works were his life's study shewing their beauty to his fellowmen, Whose Holy Word had been his guide in life, his delight in age, and his support in death, on the 20th March 1727 in the 85th year of his age; and the feeble tenement of that powerful spirit, the only son of a widowed mother, the posthumous child of one born in a village hamlet, was borne in reverence by Dukes and Earls\*

\* The Lord High Chancellor, the Dukes of Roxburghe and Montrose, and Earls of Pembroke, Sussex and Macclesfield, all fellows of the Royal Society, bore the pall of Sir Isaac Newton.

to its last resting place in Westminster Abbey, where lie the relics of Britain's noblest, greatest, most honored sons.

One of the unsolved problems left by Newton for future Mathematicians was that of the three Bodies. A calculation was needed to determine the motion of the sun, moon, and earth, computing their mutual attraction, their various masses, and the forms of the orbits of the earth and moon. During investigations on this subject, an event occurred which cannot fail to interest all readers, illustrating, as it does, the connexion which exists between the Sciences, and shewing the spirit in which all learned men should listen to each other's opinions, and give respect to studies in which they themselves are not engaged, being sure that truth is one, and in all sciences there must be unity of *purpose, plan, and design*, for their Maker is One.

About five and twenty years after the death of Newton, the celebrated French philosophers, Euler, D'Alembert, and Clairaut were engaged on the problem of the three Bodies, and various and of various merit were the lunar tables brought out by them all. Clairaut, in computing the moon's motion in apogee (i. e. in the major axis of her orbit), found it to be the same as that given by Newton, namely, one half of what observation makes it. Clairaut, firmly believing in the infallibility of his calculus, began to doubt the truth of the law of gravity, rather than suppose his figures faulty, and even published an opinion, that the force that keeps the moon in her orbit, does not decrease as the squares of the distance, but that only part of the journey follows this law, the other half (according to him) being as inversely proportional to the fourth power of the distance! Here Buffon stepped in from his metaphysics, to combat such an opinion with severest criticism; the natural fitness of things shewing him its antecedent improbability; upon the ground that the simplicity of all nature's laws and their sufficiency were at variance with such a theory, and that there was a want of sufficient reason shewn for determining which part of the orbit should follow the law of the square, and which the bi-quadrature power of the distance. Although the Mathematician was very little disposed to admit the authority of the Metaphysician, Clairaut was driven back to his calculus; and Buffon triumphed, looking with more correctness of vision from his wider range of view; for Clairaut discovered, that he had passed over a fraction in his calculation, which he considered too small to be of consequence (!)—surely a most unphilosophical mistake for one who holds, that the slightest departure from a parallel line goes on increasing infinitely. Upon including this rejected fraction he carried the approximation further than before, and found that “the numerator of the fractional term, which measured the part of the earth, from which followed

the bi-quadrate power of the distance, *was nothing*, that no such power was exercised by the earth." Clairaut publicly acknowledged his mistake, and found that the new calculus brought the motion of the lunar apogee to coincide with observation.

A most interesting conclusion this ; correcting a mistake in Newton's calculation it established his law—for theory *must* ever be confirmed by practice—correcting a mathematical error, and, at the same time, confirming mathematics. The Mathematician, lover of the exact sciences, was driven to more exactitude still by the Metaphysician, whom he despises for his vague argument not founded on figures but on logical distinction. Two sciences, by spirit opposed, were found aiding, correcting, and elucidating each other ; two great men, seeking truth by different paths, arrived at the same point of difficulty, and helped each other to surmount it ; one falling into error because he was human, corrected it because he was earnest, and published his recantation because he was an honest lover of truth.

The above incident took place rather more than a hundred years ago ; since that time other advances have been made in Science, and are being made daily ; and all, in whatever land, or whatever the scientific subject, while they shew forth more and more the infinite richness and perfection of the works of nature, tend continually to confirm the discoveries of the greatest of her sons, Sir Isaac Newton.

Mr. Grant, as his title indicates, treats of these theories, and of their subsequent development. This development was for long carried on by the Astronomers of other countries—to our shame be it spoken. In the last century Lagrange and Laplace added to the treasures of Astronomical knowledge ; but of late years, as Mr. Grant shews, the names of Englishmen are to be found amongst those to whom Physical Astronomy owes many of her discoveries.

We would notice briefly one or two other subjects treated of in this work—the discoveries of the present age, unknown even to our immediate ancestors. One is the discovery of the regularity of irregularities—the Law of the inverse problem of perturbation.

Irregularities have appeared in different bodies of our system, irreducible to Newton's Law. These have puzzled astronomers, and held the universal belief in that Law occasionally in abeyance ; but as one after another has been brought into closer observation, and more intimate acquaintance, they all fall into the general harmony. Observations and calculations were made by old Lagrange on the irregularities of Jupiter and Saturn ; and he made approximations to an elucidation of the mystery by further studies of the problem of the three Bodies ; but Laplace found the true cause in their exact mutual influence ; that as the one, the motion of Jupiter, would

be accelerated, that of Saturn (according to his computed mass, distance, motion &c.) would be retarded. He reduced the relative inequalities of the two planets to a law, found that they arise from the mean motion of Jupiter being to that of Saturn, as that of 5 to 2, the difference being  $\frac{1}{4}$ th part of the mean motion of Jupiter. 'These inequalities reached their maximum in A. D. 1560. From that period they have been approaching their *true* mean motions, and became the same in 1790.' He afterwards reduced the errors in the calculated tables of Saturn, from 20' to 2". And thus this great Mathematician (by establishing the law that regulates irregularities, and shewing that having advanced to a certain defined limit of eccentricity, they begin to go back; and having attained their mean real motion begin again to change, advancing and retrograding, not according to chance, or a contradiction of the law of gravitation, but by a just computation of their mutual attractions,) this great Mathematician had the satisfaction of removing the last clog which appeared to hang on the wheel of the Law of Newton, which now rolls unobstructed through universal space.

Adams and Leverrier, by their learned solution of the law of the inverse power of perturbation, discovered the new planet Neptune then yet unseen, perceived only by its disturbing influences on others!—a perfection of mathematical deduction, not contemplated by Newton, Euler, Lagrange, or Laplace!

It were long to tell of all the subjects of modern interest treated of by Mr Grant, of comets, planets discovered, eclipses, Saturn's system of rings, Jupiter's new satellites, and many other wonders; but it might be interesting to such as have not followed Astronomical discovery, even in the casual way in which readers of the current literature of the day do in England, to see a table of the new planets, which have presented themselves on the field of the improved telescopes during the present century—the last 54 years—twenty-three in number.

If they really be the fragments of a disrupted planet it is indeed wonderful. Of the probability of such a theory it is not for us to judge, whilst it is adopted by many of the learned. There however are the stars.

|                     |      |            |    |            |
|---------------------|------|------------|----|------------|
| Ceres discovered in | 1801 | Jan'y      | 1  | by Piazzi. |
| Pallas              | "    | 1802 March | 28 | " Olbers.  |
| Juno                | "    | 1804 Sept. | 1  | " Harding. |
| Vesta               | "    | 1807 March | 29 | " Olbers.  |
| Astræa              | "    | 1845 Dec.  | 8  | " Hencke.  |
| Hebe                | "    | 1847 July  | 1  | " Hencke.  |
| Iris                | "    | 1847 Aug.  | 13 | " Hind.    |



|                     |      |       |    |               |
|---------------------|------|-------|----|---------------|
| Flora discovered in | 1847 | Oct.  | 18 | by Hind.      |
| Metis               | 1848 | April | 25 | „ Gasparis    |
| Hygeia              | 1849 | „     | 12 | „ Do.         |
| Parthenope          | 1850 | May   | 11 | „ Do.         |
| Victoria            | 1850 | Sept. | 18 | „ Hind.       |
| Egeria              | 1850 | Nov.  | 2  | „ Gasparis.   |
| Irene               | 1851 | May   | 19 | „ Hind.       |
| Eunomia             | 1851 | July  | 29 | „ Gasparis.   |
| Psyche              | 1852 | March | 17 | „ Do.         |
| Thetis              | 1852 | April | 17 | „ Luther.     |
| Melpomene           | 1852 | June  | 24 | „ Hind.       |
| Förtnuna            | 1852 | Aug.  | 22 | „ Do.         |
| Massilia            | 1852 | Sept. | 9  | „ Valz.       |
| Calliope            | 1852 | Nov.  | 16 | „ Hind.       |
| Lutetia             | 1852 | Nov.  | 15 | „ Goldschmidt |
| Thalia              | 1852 | Dec.  | 15 | „ Hind.       |

In the misty atmosphere of our own land, though the minds of her learned men are clear their telescopes are not so, and great are the disadvantages attendant on our insular position and high latitude. It has been proposed, and let us hope for the honor of science the idea may be carried out, that a gigantic telescope should be transported to the more transparent atmosphere of tropical climates; to India where the stars and planets assume a double magnitude, to the Himalayas perhaps, mounting to an altitude above the mists that hang in the valleys, or to the Andes of South America, or to ancient Egypt, where lie the bones of old astronomers and where the air is clear. Speed it; bring it to pass, say we; may the wonders it may reveal loom in our own day. We despair not of seeing it; let all scientific men of all lands go hand in hand in such a project, and what are the marvels of beauty and design it may not reveal? What the nebulous mists it may not resolve into, stars, what the distant laws and systems, what the hidden mysteries of our side of the often-considered lunar disc, what the secret history of the Sun himself? As the earth teems with life through the microscope so will the heavens through the telescope, and the largest minds will be lost in the contemplation, and see how, as one star differeth from another star in magnitude, all are nicely fitted together,

“From Harmony to harmony the universal frame began,

From Harmony to harmony through all the compass of the notes it ran;”

and every fresh discovery will throw light on that which has gone before, and glory on that which is to succeed; and every fresh star, will swell the chorons, that the Earth and Heavens sing to Him, who made them and pronounced them “very good.”

## ART. V.—RAJPUT INFANTICIDE.

*History of the Suppression of Infanticide in Western India under the Direction of the Government of Bombay, including notices of the Provinces and Tribes in which the Practice has prevailed.*

By JOHN WILSON, D.D., F.R.S., Honorary President of the Bombay Branch of the Royal Asiatic Society, and Missionary of the Free Church of Scotland &c. Bombay: Smith, Taylor and Co. London: Smith Elder and Co. 1855.

ANCIENT and Modern India have their broad and marked peculiarities. The land is not more distinguished by geographical features, than by the moral and religious phenomena of its people. Ancient and Modern India present also some of the most perplexing problems in the history of man. On these we mean not to expatiate, but only to exemplify one of them in the subject of the work before us.

Infanticide is a fact painful and bewildering—involving indeed a problem the solution of which is not to be attempted by the student of India alone but of Paganism in general—a fact only the more perplexing on that account. Were it the result merely of a moral obliquity produced by the peculiarities of Indian society we might fall back on these for its explanation. But when we should have accounted for Indian Infanticide in this way, we should have the broader fact,—proved by many historical testimonies in the opening pages of the volume before us, and patent to all conversant with the history of ancient nations,—that infanticide has prevailed in many lands, and among many nations claiming no common origin. In this presidency we are so much accustomed to hear this crime associated with the chiefs of Káthiawár and Kachh, bearing the patronymic title of Jádejá, as to forget that the same phenomena of depravity appear in other parts of India as in Rajputana, in Orissa, and in the Benares and other Districts.

Seriously to ask, is infanticide a revolting crime? seems an insult to the human mind. Does it spring from man's intellectual and moral powers? or is it a violence done to them? In whatever way we view it, it presents humanity in so gloomy an aspect as to thrill the true student of humanity with horror. Yet Phœnicians, Carthaginians, Spartans, Athenians, Romans, Persians, Chinese, Hindus, South Sea Islanders,—Pagans both civilized and barbarous; are shown by historic testimonies to have been systematically guilty of this offence against humanity. It constitutes but a slight moral dif-

ference to say, it was here a sacrificial and there a social custom ;— in other words, that in one place or time, its motive was false religion, and in another, avarice, or the desire to save dependent offspring from the evils of life. If there be a moral shade of difference between these three motives, we should be disposed to attach the greater amount of turpitude to the second, which is the motive alleged as a palliative for the crime in the case of the feudal chiefs of the provinces now brought under review. Whether a Grecian Agamemnon sacrificing his daughter, or an Indian *Thâkur* drowning his, commit the greater outrage on man's moral nature, we deem it unnecessary to determine. But one or two examples of the painful prevalence of infanticide, as recorded in the work before us, may be noticed.

"Of all the states of Greece, the Thebans are mentioned by Ælian, as the only exception to the general practice of exposing infants at the will of their parents. Schefferus, in his annotations on the passage of Ælian, remarks, that 'this conduct of the Thebans was contrary both to the law and the practice of the rest of the Greeks, and particularly of the Athenians.' By the other states of Greece, infanticide was sanctioned and regulated by law. Some legal provisions, indeed, for the regulation of this practice, seem to have been thought requisite by the most profound and able philosophers of Greece. In the republics of Plato and Aristotle, accordingly, we find very special enactments suggested on the subject ; and with as much apparent apathy as if parental feeling and natural affection were unworthy of man. The period of marriage was to be fixed ; in regard of either sex ; the children of poorer citizens were to be destroyed at their birth ; and the children of parents of whatever rank, who had attained a certain age, were never to be allowed to appear. The Romans were not superior to the Greeks. It may be proper here to quote the words of Dr. Miller, who will not be suspected of prejudice against that celebrated people. 'By a law of Romulus,' says he, 'parents are said to have been obliged to maintain their male children, and the eldest female, unless when a child, was, by two of the neighbours, called for the purpose, declared to be a monster. A regulation of the same nature is mentioned among the laws of the twelve tables ; but there is ground to believe that little regard was paid to it ; and even under the emperors, the exposing of new-born children, of either sex, appears to have been exceedingly common.' It is well known also, that, according to the laws and customs of the Romans, the father had anciently an unlimited power of putting his children to death, after they were grown up, and even officially employed by the state, and likewise of selling them for slaves."

In connexion with this we may give another extract, illustrating the effect of the *Hindu* Law upon the state of society. After various quotations of passages from Manu, and other Hindu authorities, tending to degrade woman, both personally and socially, our author thus proceeds :

"These statutory injunctions and representations of the Hindu Shâstras, are in direct antithesis to the claims of humanity, as far as the female sex is concerned. They have not yet become obsolete or ineffective among the Hindu people. They influence the spirit and habits of the whole of Hindu society. They overpower the special legislation for the preservation of woman's life.

How few Hindu female children, in consequence of them, receive on their birth a cordial welcome into this world ! How many of them, instead of being reared with care, and tenderness, are consigned to neglect, issuing in death ! How averse is the community to all female education directed to the culture of the mind and the regulation of the moral affections ! How numerous are the premature and foolish and unsuitable marriages, especially on the female side ! How many spouses are treated as prisoners by the higher classes, and by the lower as slaves ! How incapable are mothers of devoting themselves with intelligence and prudence to the intellectual and spiritual training of their offspring, and of winning it to the love, acknowledgment, and practice of what is good ! How destitute are widows of that sympathy and support which their bereavement requires, even when they escape the *Sati*, or method of purity, which the *Shástras* require when they recommend the bereaved wife to surrender herself to consumption on the funeral pile of her husband ! The recommendation of *Sati* alone may account for the practice of Infanticide. If to preserve a widow's chastity she may be burned, a daughter, of whose marriage in the line of caste and dignity of family there is but little prospect, may be destroyed."

On the revolting subject of the *mode* in which female infants are murdered in India, we prefer extracting one or two more sentences to giving any words of our own.

" 'The custom mentioned in Gajra Bai's relation,' says Capt. Seton in 1804, 'is in force to this day ; every female infant in the Raja's family of a *rání* or lawful wife, is immediately dropped into a hole dug in the earth, and filled with milk, where it is drowned.'

" About the *methods* of the destruction of their infant daughters by the *Jádejás*, Major Walker's inquiries (says Dr. Wilson,) were probably as successful as could have been expected. They were reluctant to speak on the *dikri mára-wánti chál*,—'the custom of killing daughters,'—remarking that it was an 'affair of the women.' It was well ascertained, however, that it was especially 'an affair of the men,' as it was according to their hints or orders that the crime was perpetrated by the women. They appeared, it was found, to have had several methods of destroying the infant ; but two were commonly prevalent. Immediately after the birth they put into the mouth of the infant some opium, or drew the umbilical cord over its face to prevent respiration. The destruction of such tender objects was not difficult. In some instances death followed neglect, without violence. The mother was said to be the usual executioner in *Káthiáwád*, and the female *Rájpur* in *Kachh*. When an inquisitive person asked a *Jádejá* the result of the pregnancy of his wife, he would, if it were a female, answer 'NOTHING,' an expression in the idiom of the country sufficiently significant, and used with the utmost levity. Only a few instances were known of any of the *Jádejás* of *Káthiáwád* having preserved their daughters ; but by doing so, they rather lost than gained repute."

Such facts as these, if we confine our view to India, and chiefly to those parts of it that form the subject of the volume before us, force on the mind grave thoughts regarding the influence which custom and superstition exercise over ignorance in searing the human conscience. This inward sense does indeed constitute an impassable barrier between man and the most sagacious of the inferior creatures, which can never be brought to perceive moral distinctions, and which cannot make even a mistake in moral differences. Their minds in this respect are a

mere blank, if it be not even anomalous to apply the word *mind* to their percipient powers. But man, unless in idiocy, is never void of the susceptibility of such distinctions. Yet though this susceptibility constitutes his moral nature, its development is not altogether innate. It must consist in knowledge ; and knowledge must be conveyed by instruction, example, and discipline. The first of these embraces human progress, discovery, and education, but especially divine revelation. The second embraces the whole salutary influence of enlightened and moralized society. The third may here be best exemplified in enlightened government.

Our object at present, however, is not a dissertation ; and we must content ourselves with pointing out the effect, not so much of simple ignorance, as of men's mutual influence in rendering one another's hearts callous and cruel. It may be safely said, that no parent, in an unsophisticated state, could bear the thought of imbruing his hands in his offspring's blood. This seems corroborated by the fact, that the perpetrators of this crime in India shrink from being personal agents in it, delegating it to nurses or other merials, and resorting to other modes than the actual spilling of infantile blood, as exemplified in the last extract. But how dim the moral vision that cannot penetratethis gossamer veil, and how deep-seated the barbarism, when a feudal nobility can fortify themselves, by mutual examples, in a system of murder, rightly characterized by one of the political authorities referred to by Dr. Wilson, as the most heartless and cruel of all systematic murders.

Another thought connected with this subject, and forced on our attention, relates to the influence of Hinduism. Is it favorable or unfavorable to the rise and continuance of this enormity ? If the latter, how grew the crime into a custom having all the power of a law, under the patronage of bráhmanism in its palmy ages ? Why could it never bear the light of even the most corrupted form of Christianity ? But are not the Buddhists and the Jains, who are so tender of animal life, as to make their whole religion consist in its preservation, averse to the crime ? If so, how came it that in Káthiawár and Kachh, where their influence is paramount, their united voice has never been lifted in defence of helpless humanity ? How came it that it remained for a handful of Christian strangers from a remote island, to lift the voice of mercy, and plead in a tone that after long continued obduracy has been heard ? And how came it, that Bráhmans, and Shráwaks, and all classes of Hindus have fostered, and still foster a doctrine of woman's innate depravity in comparison with her tyrant, which by enslaving, has debased her ? And then they have laid that debasement to her account ; and by making the very fact of her birth and existence a dishonor, have made her death be

regarded as a desideratum, except when she is required for the gratification of passion, and the procuring of sons, so essential according to their estimate for happiness in the next birth ! Against this, how feeble the few shloks quoted by a native essayist of ability !—how light in the scale, compared with the whole authority of Manu's Institutes, as bearing on the social state of poor unhappy Indian woman ! This is rendered very clear by our author, who presents us, in the following summary, with several notable precepts of the Hindu law-books.

"Much of the favour shown to woman by the Hindu Shástras,—when indeed they do show her favour,—is founded on the low idea that she is the property of man, as his ox or ass. It is on this understanding, and that she may bear to him a son, without whom, natural or adopted, he can have no salvation, that her life is to be preserved, and that she is to have that degree of comfort which may be allotted to her....Her general debasement, according to the Hindu Shástras, is extreme. This is a subject, bearing so directly on the estimate which must be ultimately formed of the value of female life in India, that it may be proper for us to enter into particulars respecting it.

"Of the original constitution of woman, as distinguished from that of man, the Hindu sages and legislators, the authors of the Hindu sacred books, have thus written :—' Falsehood, cruelty, bewitchery, folly, covetousness, impurity, and unmercifulness are woman's inseparable faults.' 'Woman's sin is greater than that of man,' and cannot be removed by the atonements which destroy his. 'Women are they who have an aversion to good works.' 'Women have hunger two-fold more than men ; intelligence (cunning), four-fold ; violence, six-fold ; and evil desires, eight-fold.' 'Through their evil desires, their want of settled affection, and their perverse nature, let them be guarded in this world ever so well, they soon become alienated from their husbands. Manu allotted to such women a love of their bed, of their seat, and of ornaments, impure appetites, wrath, weak flexibility, desire of mischief, and bad conduct. Women have no business with the text of the Védas. This is the law fully settled. Having therefore no evidence of law, and no knowledge of expiatory texts, sinful women must be as foul as falsehood itself, and this is a fixed rule. To this effect, many texts which may shew their true disposition are chaunted in the Védas.' It will be observed that it is the sex, and not the race, that is here condemned. The idea that woman is a 'help-meet' for man, seems never to have entered into the minds of the Hindu sages. They uniformly treat her as a necessary evil, and a most dangerous character. Her position according to them, is that of a continuous slavery and dependence. 'By a girl,' they enjoin, 'or by a young woman or by a woman advanced in years, nothing must be done, even in her own dwelling-place, according to her mere pleasure : in childhood must a female be dependent on (or subject to) her father ; in youth, on her husband ; her lord being dead, on her sons : a woman must never seek independence.'

"The injunctions laid down in the Hindu 'sacred books' respecting the treatment of a widow, are many of them of a harsh and inequitable character. In no circumstances is she permitted to remarry, as a widower may do, though she may have been espoused in infant infancy and never once have been under her husband's roof. Throughout life she must live deprived of many lawful comforts and harmless enjoyments. According to the Shástras, she must be divested of ornaments, and submit even to the mortification of never sleeping on a couch."

More to the same effect, is to be found in Dr. Wilson's pages. The crime in view, however, stands linked with the Hindu system, in another respect. It is based on the ideas and customs of caste. Had caste (*gnyát, ját*) not been established in Manu, and other bráhmínical Shástras, and had it not been deeply engraved on the heart of Hindu society, the foundation of Jádejá pride could not have been laid; and the avaricious motive for cherishing that pride could not have been fostered. But this gigantic evil has widely spread its baneful shade; and even without that shade, no more intense gloom can appal the soul, than the expression of the father's countenance who can issue an order for his daughters' murder or immolation; and instead of allowing nature and conscience to speak, can plead custom, caste, birth. The immolation of devotees, the self-torture of ascetics, the exposure of parents, the fires of the *sati*, are strange features of Indian civilization. But we agree with Mr. James Erskine that,

"As to the Jádejás themselves, any reasonable man would at once declare that no law could control their iniquity. The voice of conscience, the representative of God in the hearts of men, is entirely hushed in the breasts of those relentless wretches. To awaken within them this divine monitor, to what earthly power can we appeal? It is true that no one becomes infamous at once, but it is equally so that no one sunk in the deepest abyss of iniquity can ever suddenly become virtuous."

Of all murderous systems, indeed, the strangest is that familiarized to us by the rather soft name of *Infanticide*. What must the social state be, in which the heads of a tribe, the Hothi, could write the following letter to the Ráo of Kachh?

"The worshippers of Mátá Kunarjí and Dansinghjí write to his Highness the Rao Desaljí: 'You have sent here Thákúr Rághují; he has told us not to destroy our female children, and called us and the Tumadiwálá to Bhuj, after which we came here and took the orders of Mátájí; but this is not the order of Mátájí, so we cannot keep our children alive without the order of Mátá. Formerly the Sahib and Lakmidás Mehtá called us, and said, that our girás would not be unjustly taken by the Darbár, to which purport they would give us a writing, and that we should agree not to put to death our female children; but at that time we neither gave a writing nor received one; but now his Highness says that we are to preserve our female children. On this we requested the orders of Mátájí, but Mátájí gave us no order, therefore we cannot preserve our children. Those who formerly among us preserved their children, and those who married them, have perished, and have left no posterity. How, therefore, can we preserve them? We are the faithful servants of the Ráo, and from the power of Mátájí and the Ráo our characters in former time were preserved (when they did not consent to stop child-murder); why should it not be so now, when it is in your power? This place was privileged by your ancestors fourteen generations ago, since which time it has always remained an asylum; therefore do you give an answer to the Sáhíb on this subject, for we cannot consent to this.' A sufficiently plain avowal of systematic murder!"

To begin to refute the caste system would hardly be in place here;

and what more crushing refutation could be produced, than the fact that a father, sooner than betroth his daughter beyond the limits of one or two tribes, will be her murderer? It will be of no avail to compromise the matter by saying it is not caste, but family, rank, blood, which is the motive; for this is precisely the idea the word caste conveys. Many are the inconsistencies into which this corrupt system leads its slaves. If the Jádéjá honor must be preserved at such a price, how comes it that a Jádéjá must not marry a Jádéjá, and consequently that every Jádéjá in the land contains the blood of some inferior tribe in his veins? And how comes it, that this comparatively modern tribe should be so sanctioned in its arrogance and so enshrined in the respect of Hindu society?

It is one phase of the feudal, or otherwise barbaric chieftainship, that has so mightily and so perniciously played its part in all transition states of society. From the kings of Canaan who fell before the potent arms of Joshua, to the feudal Thakurs of Káthiawár through many intermediate ages, nobility and serfdom, family and its pride and power, pervade all. The multitude will not, through the medium of a few generations, look back to a family as originating in a wily statesman, or a successful brigand. The idol, once erected, will be worshipped by thousands or millions of serfs. Man is a religious being, and he must have something to venerate. If knowledge present not to him sublime objects, he will be debased by such as are grovelling. If the true God be unknown to him, he will create or receive gods as vain as his fancies, as corrupt as his feelings. The inference from this fact in favor of sound systems of education,—of education involving religious tuition,—is too obvious to be insisted on.

It may not be out of place here to illustrate the chieftainship with which we have at present to deal, by an extract on the origin of the Jádéjá tribe as traced by our author.

"The *Jádéjás* with whom these pages have most to do, entered the country from Kachh. They are the descendants of the Rajputs of Sindh, and allege that they are the representatives of the *Yúdavus* of the Mahábhárata. The accounts which are current of their entrance into Kachh and Káthiawád are very contradictory; but the following statement, founded on various manuscripts which we have examined and inquiries which we have pursued with intelligent natives, and on European tables of chronology, may be received as an approximation to historical precision. Sindh was first seriously invaded by the Muhammadans about the year of Christ 711. It was a possession of the Ummayyad Khalifs in 750. In 1025 it was conquered by Mahmud of Ghazni. The *Súmrás*, a native tribe, converted to Muhammadism, attained to power within its boundaries about 1054; and they in their turn were overthrown in 1340 by the *Sammás*, another native tribe also converted to Muhammadism. Some of the *Sammás*, probably before this time, had spread into the adjoining territory of Kachh, where they partly maintained their



Muhammadism, and partly returned to Hinduism, which their forefathers had been driven by violence to embrace. The Sammās in Sindh were overcome by Sháh Beg Arghun in 1521; and numbers of them, after that event, fled to and settled with their brethren in Kachh. Of these fugitive Sammās and the elder Sammā settlers in Kachh, the Jádejás are the descendants. Their chief had the title of *Jám*, formerly borne by the head of the tribe in Sindh. He seems to have been descended from the earlier Sammā settlers; for, in the genealogical tables, we find Ráydhán, the first Jám in Kachh, mentioned as being there A. D. 1464. The thirteenth Jám after this Ráydhán, through his eldest son Gajanjí, settled at Vinján,—the younger being Udoj, from whom the Ráo of Kachh is descended,—passed into the peninsula of Gujarát, and established himself at Nawánagar or Jámnagar in Ilalád, and conquered that, and the neighbouring territory, in Samvat 1596, or A. D. 1539."

The following will convey some idea of the state of the province into which the Jádejás entered :

"The sovereignty of Káthiawád is greatly divided and impaired. At present, even after many encroachments of the Maráthás, there are within the province nominally 224 separate jurisdictions, which are actually divided in the case of the minor Rajput and Káthi States into many other 'sovereignities' so-called. The province is tributary to the Gáikawád and British Governments, the latter of which now maintains within it the rights of the Peshwa as well as collects the whole of the tribute. On various portions of it, the Muhammadan chief of Junághad has claims for *Zortábi*, or compromise for black mail. Education, even in its simplest elements, is but little diffused in the province; and the principles of civil and criminal law are but slightly understood by its people, the country, till lately, having been quite remarkable for its turbulence and violence. Generally speaking, its people are not more immoral than those of other parts of India. They are distinguished for their hospitality especially to Hindu and Jaina pilgrims, who swarm through the province. The Bráhmans have but little influence in the land; and the most important portion of them, the *Nágars*, are completely secularized as managers and clerks to the native Rájás. The *Chárans* and *Bhátas* are sacred characters and genealogists, the bards of the chiefs, occupying themselves, too, in the rearing of cattle. They are sometimes Rájgurs, family priests, to the chiefs, as well as the Bráhmans, professing to bear the sins of their representatives. The *Jainas*, to whom most of the merchants and money-lenders belong, are haughty and intolerant to the full extent of their power, which is not inconsiderable, as they contrive to bring most of the chiefs into their debt."

These extracts may serve to illustrate the circumstances in which British intellect, civilization, and enlightened principle were brought to bear on the provinces stained by merciless treatment of infants,—by utter heartlessness and want of natural affection towards them. It may be said parental feelings still existed and exist among these people. It is indeed an important fact that God has implanted these feelings in the human heart as he has implanted conscience; and that neither barbarism nor corrupt social systems can utterly extirpate them. But how inert they may become, how callous and inoperative, may be seen from many facts; from cannibalism, from slavery, from thagáí, from religious persecution, from ascetic mortifications, and many

other humiliating practices. This only goes to show the moral responsibility of those who stifle the voice of nature and of God ; and it opens more widely the path on which philanthropy may tread, though it greatly augments the difficulty of making progress in that path. It is interesting, it is beautiful, to trace the footsteps of British philanthropy on this dark field. It is pleasing to find knowledge invade the realms of starless ignorance ; it is interesting to see human reason master the brute force of the lion and the elephant ; and still more so to find civilized man rising superior to barbarism, when the two come into contact. Still more so when this civilization comes with all the mildness of a Christian aspect ; when the lamb overcomes the savageness of the wolf ; when Christian power and mercy in hallowed combination meet with man's corruptions, and by the mildest pressure achieve a wondrous victory, and in that victory bring rescue to the miserable. And, surely, in this interesting picture it is not the faintest light of the perspective to see such philanthropy walking under the sanction and mandate of a Christian government, which, without any ecology and with all due deduction of errors and imperfections, merits the applause of having moulded the chieftainship of Káthiawár by the power, not of arms, but of moral suasion ; and if not of Christianity, yet of mercy that originated only in Christianity. Every reader will think of Colonel Walker and his coadjutors and successors, sustained by the Governments of Bombay and of India.

The philanthropist has his mission ; and government has its mission. Both in the proper sense of the term have the commission of heaven ; for an onus of duty is laid upon each of them, when a sphere of operation is presented. Both are sent on the errand of love, which sees vice and wretchedness, and shudders at the one, without recoiling from the other "and passing by on the other side." Let both speed on their destined tracks. Let Walker, and all the political agents down to the present day, have free scope, and be unfettered in their attempts to do good. And if sometimes they have not aimed sufficiently high, and sometimes have placed too much trust in representations of the discontinuance of the evils on which they waged a pacific war, (this paradox is the true description of their system of action,) let their novel and trying circumstances plead for them ; and let those who follow not rashly condemn, but wisely work out their system to its ultimate issue.

And if we think the government of the days that are gone left some things unattempted, and failed in others and made mistakes, still let us look at the justly honored names of those who have swayed the sceptre in Western India ; and say whether thought and right principle were not at work in their bosoms ; and whether the history of

female infanticide in Káthiáwár and Kachh and other provinces, brought so far towards extirpation, be not a monument of a government and its agents better and more enduring far than provinces won on bloody fields; and whether the sums disbursed from an infanticide preventive fund were not nobler than the richest prize money ever distributed to our victorious armies.

Since the detection of the existence of Rajput infanticide by Jonathan Duncan some of the finest pictures of humanity have been portrayed. If the Rajput provinces of India have appeared, like other dark places of the earth, full of the habitations of cruelty, the darkness of the picture is relieved by the noble specimens of genuine philanthropy that have been called forth. Treatises, Parliamentary Papers, Reviews, and latest of all, the elaborate and exceedingly interesting volume now before us, have so traced the origin and progress of these philanthropic efforts, that a circumstantial detail were now supererogatory. Following in the wake of these honored men, we find such names as Macmurdo, Willoughby, Lang, Wilkinson, Malet, Jacob, Pottinger, Wallace, and others. It is difficult to say which, most to admire, the unruffled patience and temper displayed in their treatment of the perplexing and exasperating subject, the tact by which facts and testimonies were elicited, or the discernment of the merits of successive reports displayed by governors and their councils. But to whichever of these we direct attention, we have a lesson of the value and power of perseverance; and we see it proved experimentally that man's cause is not hopeless; and that those who will brave bigotry, and be unshaken by discouragements in right endeavor, will never lose their reward. In addition to all the pure and enviable fame of individuals, come the accession made to the prestige of government by the character and power thus created, and the righteous appropriation of previously misapplied resources, and the progress made towards a healthy tone of the community.

In all this progress we see the triumph of mind, of knowledge, of morality, of religion. And we see, too, the preponderance of British rule, when weighed in the scale against the Walabhi and other early Hindu dynasties and the dynasty of Delhi paramount in its day, and the more recent and compact Maráthí dynasty. Their history is a record of conquest, and of exaction, and of social debasement, but without any bright element, any redeeming quality. In vain do we inquire after any monuments of theirs that might be supposed to prompt an educated native to wish for their return. Their reforms, their hospitals, their school-systems, their roads, or foreign commerce, or development of national resources,—where were they? and where are their traces to be found? Rapine, devastation, and a prostrate com-

munity, were all that told of the existence of these dynasties. But the details of history and statistics, so far as the subject of the volume under review is concerned, we leave to the author, simply giving an extract illustrative of the entrance—or rather raid—of the Maráthís, for the purpose of levying the tribute called *chauth*, or fourth part, from the towns of Káshiawár.

"The first inroads of the Maráthás into Gujarát, it is here proper to observe, took place under Shivaji the founder of their empire, and ~~was~~ as entirely unprovoked and unjustifiable as any of their other movements exterior to their own country. Its issue was the subjection of a part of that territory to the tribute of the *chauth*, or portion of the fourth, which was levied under the pretence of a protection which was neither needed nor desired...."

"The usual method of realizing the tribute exacted from the peninsula in behalf of the Gáikawád and Peshwa, was by periodical circuits enforced by military array. One of the ameliorations proposed under the alliance now referred to, [of the British Government with the Gáikawád] 'was,' to use the words of Mr Duncan, 'to avoid the necessity for the ever-recurring and coercive progress, by inducing the dependent local rulers in Káthiawád, chiefly through an appeal to their own interests, to accede to an equitable permanent accommodation, ascertaining the amount of their future pecuniary acknowledgments, without the concurrence of force for their realization. Toward the attainment of these salutary ends, it was deemed expedient that one general circuit should be made through the peninsula assisted by the appearance of a detachment from the British subsidiary force, and it was thought a duty of humanity to aim also, on this occasion, at the suppression of female Infanticide.' The plans of the Bombay Government in reference to these matters were approved of by the Supreme Government of India, though in a somewhat cautious form as far as the attempt to suppress Infanticide was concerned."

In recognising the above triumph of intellect and of moral elevation, it is not necessary to deny the natural shrewdness of Hindus. Their Japhetic origin in common with Europeans is beginning to be understood by many of the educated among themselves; and our fair-haired Saxon race can arrogate no privileged aristocracy of mind. But it is of importance not to overlook the fact of mental development for many generations, on the one hand, and mental depression on the other; of motives and inducements in the West awakening genius, shaping its course, calling forth inventions, raising learned professions, and instituting national rewards;—and on the other, caste binding down man to grovelling debasement, and absolutely restraining him, under pains and penalties greater than any civil disabilities, from daring to entertain an idea not stereotyped in past centuries. But who that wishes well to his kind does not hail the entrance of light, and welcome the schoolmaster; and bid government speed in enacting the freedom of all its subjects from the grinding tyranny of caste and clan? Much might here be said of the contempt which natives have for education, especially that of females, as contrasted with the steady progress and sure, though

slow, triumph of knowledge, both secular and religious, over the dark domain of barbarity.

"Education," the great remedy, says Lieut. Colonel Jacob, "is regarded by the Jádéjás with supreme indifference, if not contempt. They like to adhere in everything to the ways of their forefathers, and in all matters of innovation however beneficial or profitable resemble the deaf adder of Scripture. I have failed to make the smallest impression on any one of them. Irresistible arguments are like light to the blind. Even His Highness, [the Ráo of Kachh] though far above all his bháiyád, is insensible to the benefit that would ensue to his country from any general system of education. He supports the [vernacular] school at Bhuj out of deference to his English advisers, not from any love for it. He tells me that he thinks his people are happier by following their own way than by learning ours."

Let Walker too express his natural and yearning hopes,—hopes partially disappointed but still tenacious,—hopes which must either be sympathized with by the political agent, the school-master, and the missionary, or they lack one essential qualification for their respective offices.

"I entered on this undertaking," he says, "with sanguine expectations of success, but which were, for a long time, disappointed; and I must own that the natives had formed much more just opinions on the subject, when they foretold the difficulties that would attend the attempt: which few of them thought could be overcome, but by the Company making a conquest of the country. I conceived that reason and feeling would effect the relinquishment of a barbarous custom unconnected with the principles of society; and which all the passions of the human mind, and all the forms and maxims of religion, were combined to destroy. As it was evident also that the most disinterested humanity had led the Honorable Company to interfere for the abolition of female Infanticide, I conceived that this reflection, and the respect due to their mediation, would have disposed the Jádéjás to comply with a request, which it was scarcely to be supposed could be at variance with their own sentiments. But sentiments of nature and humanity have no influence with the Jádéjás; and I was soon, however reluctantly, obliged to relinquish the favourable expectation I had formed of success. The difficulties were many and formidable."

And the head of a Jádéjá tribe, or bháiyád, may be allowed in their own style to exemplify the phase of mind, when inflated ideas of rank and long, unbroken bigotry, are beginning to succumb, if not to conviction yet to the prestige of philanthropic power.

"(After compliments). It is notorious that since the Avatára of Shrí Krishna, the Jádéjá people, who are descended from the adus, (Yádavas) have, during a period of 4800 years, been in the habit of killing their daughters; and it has not reached your knowledge, that all of God's creation, even the mighty Emperors of Hindustán, Sháh Jehán, Aurangzib, and Akbár, who have successively reigned in Hindustán; those of Khorásan and Ión, and the Rájás of the four quarters of Hindustán; besides all others the conductors of the affairs of this world, who have existed from time to time, have always preserved friendship with this Court, and never acted in this respect (female Infanticide) unreasonably.

"Even the King of the world, who is protected by God, the King of Rum

[the New Rome or Constantinople], descended from a long line of illustrious ancestors who have reigned over that country from the earliest times, and in whose dominions is situated the inestimable and glorious Mecca, never once thought of putting a stop to the custom which prevails among the Jádéjás of killing their daughters, but on the contrary has preserved friendship at all times with this *darbár*: and merchants possessing lakhs of wealth belonging to this country reside here, and people of equal wealth of this country reside there, but he never once uttered any thing on the subject. But you, who follow the paths of the King, and who are an *amír* (noble) of the great Sirkár, the Honourable Company, having written me on the subject, I have derived much uneasiness, for it does not accord with your good character.

"You should reflect, that though the authority of many kings and rájás, the King of Rum excepted, has decayed, or passed into the hands of others, still the Government of this country has remained unmoved from the period of the avatára of Krishna unto this day, and this country contains so many brothers of one heart, descended from a common parent, as is not to be found in any other quarter; but they have not to this day departed from the habit of female Infanticide; they have however approved of two good customs. First, in this country neither birds nor animals are killed, goats excepted; and but few even eat them. Secondly, charitable places for fakirs [religious beggars] going and coming from Mecca, and Hindus performing pilgrimages, are so strongly planted that the pilgrims suffer no annoyance.

"This *darbár* has always maintained friendship beyond bounds with the Sirkár of the Honourable Company; and notwithstanding this, you have acted so unreasonably in this respect, that I am much distressed. God is the giver, and God is the taker away; if any one's affairs go to ruin he must attribute his fortune to God. No one has until this day wantonly quarrelled with this *Darbár* who has not in the end suffered loss. This *Darbár* wishes no one ill, nor has ever wantonly quarrelled with any one. Every thing that may happen is from God. I bow obedient. Do not again address me on this subject."

But let us pass on to our more immediate subject of the extent of Jádéjá infanticide. We have the following notices of it.

"One account which he [Col. Walker] received, he was aware, had the appearance of exaggeration. It estimated the Jádéjás in Kachh and Káthiáwád at 125,000, and the number of female infants annually destroyed at 20,000. Another estimated the yearly Infanticides in the latter province at 5,000, and those in Kachh, making allowance for the families which, it was supposed, had discontinued the practice, at 25,000, being in all 30,000 infantile murders in the space of twelve months. A third, which he considered as much below the truth, as the preceding was above it, gave the annual infanticides south of the gulf of Kachh as ranging between 1,000 and 1,100, and those north of that gulf at about 2,000. Even this last estimate, to the credit of human nature be it said, was greatly in excess of the reality. It is evident from the statistical tables, now carefully prepared, that the annual number of ascertained female births among the Jádéjás in Káthiáwád may be stated at about 250, and in Kachh at about 225. The infanticides among the Jádéjás alone, then, did not fall much short of 500 annually.

"On the *origin* of Infanticide Colonel Walker thus writes:—"The Jádéjas relate, that a powerful Rájá of their caste, who had a daughter of singular beauty and accomplishments, desired his Rájgur, or family Bráhmán, to affiancé her to a prince of desert and rank equal to her own. The Rájgur travelled over many countries, without discovering a chief who possessed the requisite quali-

ties, for where wealth and power were combined, personal accomplishments and virtue were defective; and in like manner, where the advantages of the mind and body were united, those of fortune and rank were wanting. The Rájgur returned, and reported to the prince that his mission had not proved successful. This intelligence gave the royal mind much affliction and concern, as the Hindus reckon it to be the first duty of parents to provide suitable husbands for their daughters; and it is reproachful that they should pass the age of puberty without having been affianced, and be under the necessity of living in a state of celibacy. The Rájá, however, rejected and strongly reprobated every match for his daughter, which he conceived inferior to her high rank and perfections. In this dilemma, the Rájá consulted his Rájgur; and the Bráhmaṇ advised him to avoid the censure and disgrace which would attend the princess remaining unmarried, by having recourse to the desperate expedient of putting her to death. The Rájá was long averse to this expedient, and remonstrated against the murder of a woman, which, enormous as it is represented in the Shástra, would be aggravated when committed on his own offspring. The Rájgur at length removed the Rájá's scruples, by consenting to load himself with the guilt, and to become in his own person responsible for all the consequences of the sin. Accordingly the princess was put to death, and female Infanticide was from that time practised by the Jádéjás."

The reader may believe as much as he pleases of the legendary account of the feudal chief and his *guru*; but let the real motives to the crime elsewhere admitted and avowed, be kept in view. These are *avarice* and *family pride*. The latter must be maintained in the selection of a husband for the thákur's daughter who may have been spared, and to this her happiness must be sacrificed; so that *so far as she is concerned*, we may, with Colonel Jacob, make it a question, whether it had not been better for her to have been a victim in infancy;—in other words, whether an early grave had not been preferable to the life she is doomed, and doomed by her own parents, to lead. This contemptible haughtiness of families must be fed also by the exceedingly disproportionate expenses that are to be lavished on the marriage; and hangers on of the petty court, bráhmaṇs, bháts, chárans, *et hoc genus omne*; have their selfish interests to uphold in the pernicious system. For this purpose the villages must be oppressed; and a year's revenue or more must be expended in such a way as to be more injurious than absolute loss. How is all this to be met in a land where heathenism makes man indolent, wastes his time in holidays, and his substance on banquets and pageants, and destroys mutual confidence by undermining truthfulness? This is the problem. Here the avaricious character of Hinduism betrays itself and prompts the heartless father to evade these difficulties, by the foulest and most indefensible of all forms of murder. And here the Hindu Shástra, with its debasement, infuses its poison; and lays its iron hand on the weaker sex. Some, in looking these facts in the face, may feel amazement, that any in political situations have palliated these murders, and pleaded for a mitigation of punishment,—for

a penalty in fact less than would be inflicted on a starving boy for a petty theft in England. Some may feel puzzled to tell why a Governor-General with universal acquiescence proclaimed *sati* to be murder and penal as such; and yet some officials of Government have been so very chary of handling these Jádejá murderers of their own infants ever so little too roughly. This may have been wise and expedient, and good statesmanship; but we must be excused from inquiring further into its moral bearings. Anomalous, as a fact, it is; but we must content ourselves with admitting the amiable and benevolent motives that were the secret principle of action in those concerned in the work for so long a time. Their object was noble; their aims were disinterested. The Government had obtained the virtual sovereignty of a country of which it did not grasp the territory. Thus without any violence, and with no punishment, beyond the infliction of a few not ruinous fines, and by moral suasion, applied with unswerving firmness, they have gained a clear triumph, done much towards wiping off this foulest spot on humanity, and opened a good prospect that the guilty custom will be perfectly and finally eradicated.

We have said that the means employed for counteracting, and if possible terminating, this evil were principally the moral influence of Government, through its agents, and the infliction of fines, which, it may be added, were to be employed as rewards for such as preserved their daughters alive.

The plans recommended by Mr. Willoughby, and acted upon by himself and his successors, and which have done so much in Káthiáwár and Kachh to suppress the crime, are stated in his own words, as follows:—

"In the first place, I would suggest that immediate measures be taken to obtain a full and complete Census of the Jádejá population of this province. The great importance of possessing information of this kind never appears to have attracted attention; but without it no data can exist for computing according to the generally received rules of population, the number of Jádejá females which are born, and thence deducing, with reference to the number actually preserved, how far existing engagements are observed by the tribe.

"In the second place, I would propose that every Jádejá chief should be required to furnish a half yearly Register of all marriages, betrothals, births, and deaths occurring among his tribe residing in his district, and that if he omits to do so, or furnishes a false return, that he should be severely fined.

"In the third place, the Political Agent in this province should be directed to consider it to be his imperative duty (and I am sure he will at the same time regard it as the most gratifying he could be called upon to perform) to furnish an annual Report on the last day of each year, on the subject of Infanticide, accompanying the same with a Register of all marriages, betrothals, births and deaths, that have occurred among the tribe within the year of report.

"In the fourth place, I beg to suggest the promulgation of a proclamation by Government throughout Káthiáwád, requiring the Jádejá Chiefs to enforce



observance of the infanticide engagements with their respective jurisdiction, announcing the determined resolution of Government to suppress the crime, and noticing, either in terms of approbation or of condemnation, those chiefs who by the present census are proved to have either adhered to or departed from their engagements.

"In the fifth place, I would propose that every Rajput in Káthiáwád should, in a circular letter from the Agent, be himself enjoined, and be requested to enjoin, all Rajputs subject to his authority to make it a stipulation in every marriage contract of the daughters with a Jádejá that the issue of the union shall be preserved."

"In the sixth place, I beg to recommend that marks of approbation be extended to the chiefs and inferior members of the Jádejá tribe who have adhered to engagements to preserve their female issue, and that the expense incurred in making the same should be debited to the Infanticide Fund."

To these means were to be added the employment of females to inspect domestic establishments, and of informers to furnish detective testimony. These persons were to be supported and protected, and the principal chiefs aided in coercing their subordinates into compliance, as in the case of the Hothí tribe, who, on refusal of obedience, received orders from Mr. Malet to leave the province within fifteen days.

It is not now so requisite, as it was some years back, to furnish statistical tables by way of satisfying the sceptic, as to the vast majority of female infants sacrificed. Still it is right, that the frightful extent of the evil should not be lost sight of; and accordingly, instead of exhibiting any arithmetical results of our own, we give examples of those arrived at by some of the Political Agents. We preface them with a few words which possess a strange kind of interest,—as they contain the first assent of a Jádejá—the thakur of Morvi—to the wishes of Government for the preservation of life. Walker says:—

"At last I obtained from Jéháji a conditional writing to the following effect — 'From motives of friendship the Honourable Company have urged me to preserve my daughters, to this I consent, if the chiefs of *Nawánagar* and *Gondal* agree.' This was the first considerable step toward the attainment of this great object, and the writing appeared to reduce the question to a kind of point of honour, or respect for antiquity, in setting the example of sanctioning an innovation on a general habit."

The sum of this is, that the agent of Government urges a chieftain to spare the life of his own child, and a reluctant assent is given on the condition that Government will oblige certain other parties to do the same. Some credit is due to the representative of humanity for the self-command which enabled him to deal patiently with such practice. Had the British power been at this period established in Káthiáwád, prompter measures might have been adopted.

The actual results obtained are stated in two ways;—the numbers saved in particular branches of the Jádejá and other Rajput fraterni-

ties, and the proportion of male to female children, shewing the numbers of the latter destroyed. When Walker commenced his labours in 1805, the destruction of the Jádéja females was universal. Mr. Willoughby's census in 1835 exhibits a proportion in certain talukas of 1422 boys to 571 girls under 20 years of age,—indicating the destruction of nearly two-thirds of the females; Mr. Erskine's, of 1422 to 409, a still greater destruction; Colonel Jacob's, of 122 to 7, or 17 male to 1 female. This might be followed by other talúkas with still more distressing indications.

The proportion of children, male and female, alive under one year, is thus shown in different reports :

Mr. Willoughby's report for 1834, shews males 137 ; females 44.

Mr. Erskine's               "       1837,       "       123 ;       "       60.

Captain Jacob's       "       1841,       "       146 ;       "       128.

Mr. Malet's               "       1844,       "       274 ;       "       232.

With one exception, probably arising from imperfect returns, these results painfully speak for themselves.

Though our principal attention must throughout be confined to Káthiáwár and Kachh, yet our readers should not forget that the same crime has been found prevalent in the political agencies of Pálhanpur and Máhi Kánthá, where the discernment and wisdom of Col. Lang, Colonel Miles, Captain Leckie, Major Wallace, and others have been called into action. At these we merely glance. We find the Court of Directors on the 4th December 1850 making the following remark on the report furnished by Captain Leckie :—

" In each of the four years from 1816 to 1849 the number of males and females above the age of twenty as stated in the returns is nearly equal, while below that age the males are much more numerous than the females. This difference would only be explicable consistently with correctness in the returns by supposing that female infanticide had been introduced into these districts within the last twenty years."

And the resolution of Lord Elphinstone's Government in 1854, in reply to Major Keily's returns for 1853 for the same locality, is worthy of attention.

" These returns show an increase equal to 1·320 per cent in the male and a decrease equal to 0·229 per cent in the female population under the Pálhanpur Superintendency ; but allowing for the disparity in the births during the year the result is more favorable than might have been expected. The male births give an addition of 4·150 per cent to that sex, whilst those of female afford only 2·758 per cent to that. Taking these results into account the balance is equal to 0·301 in favor of the females. No reason appears for suspicion that infanticide has been practised in any case during the year. Resolved that these results are satisfactory."

Here the statistics shew that, though no suspicions were entertained of any cases of infanticide in that year, the crime had not

ceased in that district, as the unnatural disproportion of the sexes still continued.

On the existence and extent of infanticide in the Máhi Kánthá, we have the authority of Colonel Lang.

"The practice of female infanticide is admitted by the Márwádí Rajputs themselves to have prevailed very generally among all the tribes of Ráthors ever since they have been settled in this part of the country. It is said to have been first introduced, twelve or fifteen generations ago, by one of the ancestors of the Kumpáwat tribe, who, for some reason or other which does not appear now to be known, bound both himself and his descendants by an oath never to preserve a female child. It is now, however, almost equally prevalent among the other Rathor tribes in this part of the country, the Champawats, Jethawats, Udawats, Ranmalawats, and even the Jodás (except the reigning families in Idar, and Ahmednagar, and their immediate relations) as among the Kumpáwats; and there is no doubt that the reason of its having become so general is the difficulty these tribes of Ráthors have of procuring suitable matches for their daughters, and the very great expense attending their marriage."

Some suggestions made by Colonel Lang were approved by the Government; but nothing further was heard until the report of Major Wallace in 1848, which exhibits in certain tribes of Márwád Rajputs a total of males 785 and of females only 185.

As to the means to be employed for extinction of infanticide in the Máhi Kánthá, Major Wallace gives his opinion thus: "It is on measures of a nature the reverse of coercive, that I look with most confidence for the eradication of a crime, which being opposed to some of the best interests of human and even animal nature, may be said to commence the struggle under considerable disadvantages."

There is much interest in the final suggestions of Walker and Duncan, given in the work under review. They are as beautiful as natural in their tone, and meet with a response in every humane bosom. Honor be to their memories, and honor be to all that aided or have succeeded them in their noble endeavours. Let their names go down to future generations with the history of the early Christians,—the Tertullians, and other apologists who asserted the laws of mercy in their day;—with Howard, who carried the light of love into dungeons;—with Wilberforce and Buxton, who pleaded the cause of the negro;—and with Bentinck, who quenched for ever the *sati* fires. And we add that the meed of honor should be awarded to the governments and governors who held their ægis over these good men in their high-principled efforts. Let the historians of future generations point their reader's attention to the inflated arrogance, grovelling avarice, and the utter suppression of nature's voice, which marked the effete sovereignties of the land; and, turning to the Saxons from the West, let them say, Let the inscription on the pedestal of British India's column be, "Righteousness exalteth a nation; but sin is a reproach to a

people." Nor let all praise be withheld from the writers who by their Reports, Despatches, Blue Books, or historic Reviews of these proceedings of half a century or more, have left the contrast between barbarism and civilization, superstition and knowledge, Hinduism and Christianity, engraved as on enduring tablets. And lastly an ample share of praise must of right be given to the author of the present volume for historical accuracy, as well as knowledge of the physical and moral condition of the provinces, acquired by learned investigation and extensive travel; and for such a comprehensive view of all that has been written on the subject, as is at once entertaining and full, containing all requisite information down to the present date.

How melancholy to turn from these glimpses of Britons in India to the haughty brahmans, and influential mahajans or shravaks, and to hear their everlasting jabber about *their* "religion of mercy;" to visit their brute hospitals (*panjrapurs*) richly endowed for the feeding of diseased animals; to inquire in vain for their hospitals for their fellow-men; to hear them defend themselves for not shewing mercy to humanity; to find them, as in some of the documents before us, estimate infant life at about the same value as the life of goats; and to see them constantly sticking for the preservation of the latter, but in the lapse of ages never making the slightest movement towards the preservation of the former. These are the men who rose *en masse* and threatened to leave a city in Káthiawár because the chief had apprehended a murderer in a Dharmshálá, and yet could quietly live under the shadow of the same and similar chiefs, although well knowing the deeds of darkness that were perpetrated by his mandate. But they will summon mobs to protect a dog, or petition Europeans in office to save dangerous bráhmání bull's from slaughter; and then without a blush,—which their face is ill-adapted to show and their language to express,—they will call theirs the "religion of mercy!"

When we add to this, that, though rejecting the bráhmánic books, yet denying God to be the Creator of the world, they sap the basis of human responsibility, and virtually accord with the vedantic tenet of the unreality of matter and spirit, God and creation; that they are determined foes to all knowledge, except that of money tables; especially, that they doggedly resist female education, and thus contribute all they can to the perpetuation of woman's debasement,—shall we not learn to attribute their love of ignorance and their misanthropy to the true source,—heathenism? Shall we not bless God for Christianity? And shall we not pray for its universal and rapid extension? That we do not charge the Jaina community unjustly in the matter of female education, is plain not only from their general disposition to stand aloof, but even from one or two exceptional

instances of apparently opposite practice. We know of a case, in which to prevent their daughters from attending a female school, patronized by Christians, they instituted a rival school; and after some time, on finding they had the field to themselves, they allowed their school to expire. Might not Colonel Jacob have equally applied to them his too just censure of the Jádéjás, "They regard education with supreme indifference, if not contempt?"

We will express no further our general approbation of the tone and tendency of British rule, except to say, it is the only impartial sway under which the natives of India have ever lived. It is the only Government of the land that has ever recognized the amelioration of the people's condition as its work, or associated this with its honor and stability. Like an edifice supported on pillars, which are decaying from within and devoured by white ants from without, previous Governments of India tottered and fell; but the British Government is laying one foundation of permanent power in the systematic counteraction of crime; and another, in systematic endeavors to educate the people. We admit, indeed, that the former is far from finished, the latter little more than begun; we admit that human imperfection has left its traces on both; still we heartily respond to a saying of one of our political agents: "The people will look back with astonishment at the wickedness of their fathers, and learn to bless the British Government who had conducted them by sure and firm steps to a state of virtue and happiness."

But here the question cannot rest. The suppression of infanticide, if definitively effected, would be only one element,—a very important and interesting element indeed, but still only an element,—in the full civilization of the people. The prejudice against knowledge,—ordinary secular knowledge,—referred to in various official documents now published, is too glaring a fact to be overlooked. Happily, systematic endeavors to remove it, in the only possible way,—that of giving positive and substantial education—have not been overlooked. Impatient observers might rush to the conclusion, that the progress has been deplorably slow, whether in the cause of infanticide or education; and it ought to be admitted, that in both, at different times, there appears too much remissness. This we shall not call culpable, for we presume it was not wilful; but arise from the truthful tone of English minds, assuming a native truthfulness which does not exist; and fondly believing that the giant iniquity was no more, when no new reports of it were given in. But a glance at the latest published statistics, quoted in the book before us, shows simply a steady diminution in the excess of living males over living females. With the exception of the latest returns from Káthiawár there appears scarcely one table in which the

male infants bear to the female so low a ratio as that of 21 to 20—the approximate ratio in Christian lands. In 1851, Colonel Lang reported that,

“The proportion of female children to males in all the tribes [Jádejá, Jaitwá and Sumrá] is now so nearly equal, and the progressive increase of the female population so regular, that if the returns can be depended upon in other respects, there would appear to be every ground for believing that the practice of infanticide must have become almost entirely extinct in this province.” Never was a triumph of Christian philanthropy of such magnitude as this, intimated in greater simplicity of spirit and language.”

In 1852, Lieut. Raikes thus wrote from Kachh :

“To show succinctly the grounds on which my suspicions rest, it is necessary to allude to a few of the villages in detail. I will take for instances :—*Mothá Bádor*, where there are 390 Jádejás, of whom 138 are married. Their issue during last year consists of 14 male and 17 female children ; of which number, no male and 7 females died at birth. At *Dhamadhá*, again, there are 142 Jádejás, of whom 57 are married. 4 female births are registered, all of whom died at birth, while of eight males born, only three died. At *Bhandrá* there are 540 Jádejás, of whom 184 are married. The number of births registered are 22 males, and 15 females, of which number one male, and six females, died at birth. At *Bándrésar* there are 423 Jádejás, of whom 271 are married, the births registered are 21 males and 20 females, of which number 1 male, and 9 females, died at birth. The above details, together with the astounding fact of no female Jadeja having apparently been born at some villages for several years, form the grounds of my suspicions.”

“I must beg to be allowed to mention the names of a village or two, where female life appears to have been trilled with. For instance, at *Khéla*, there are 52 Jádejás, of whom 29 are married, notwithstanding which no female births have been recorded for the last three years. At *Mhawá* again there are 19 Jadejas, of whom 10 are married, while but one female appears to have escaped the ruthless pride of their sues ; for it is utterly impossible to believe that but one daughter would under ordinary circumstances have survived during many years, while twelve sons have been reared. Lastly, at *Suthari* there are 23 Jadejas, of whom 8 are married ; notwithstanding which, there are only two female Jádejás, both of whom are 5 years of age. Such instances, of what I humbly conceive to be unquestionable proof of a reckless disregard for female life, might be multiplied to a considerable extent from the detailed returns now lying before me.”

In Mr. Ogilvy's report for 1852, there is too plain proof also of the continuance of the evil, though not to the former extent :

“There were 250 male and 211 female births, and 136 male and 95 female deaths, being rather less than 2 per cent of the former, and rather more than 6 per cent of the latter ; an increase over the returns of the preceding year of 52 Jádejás with one daughter alive and of 22 with two, of two with three and of one with four daughters alive ; an increase of 33 betrothed, 57 unbetrothed, and 16 married and widowed females. It appeared that of 250 male and 211 female children born in 1849, fifty-three of the former and sixty-five of the latter died, showing an excess of about 9 per cent of female over male deaths. Of 242 males and 251 females born in 1848, none of the former, but 45 of the latter died.”

The fact, therefore, is, that the venomous reptile, though crushed, is still instinct with life; and if British surveillance and pressure were but for a few years relaxed, it would revive in all its virulence. The generation of infant murderers must die out, and a new, an educated generation arise in their room, before we can assume the existence of a public sentiment which may be called a public conscience, throwing its charitable mantle over helpless infancy. Nor will an education consisting in a little knowledge of English geography, history, and science, ever effect that object. But let education have free course. Let the voice of those servants of the Government be heard, who reiterate the demand—educate, educate. Let Colonel Lang and others be cheered on in their work of rearing instructional institutions at Rajkot and other places. Knowledge once communicated will come, is coming, into conflict with error; and the result, though not sure in each instance, is sure in the aggregate. Masters may, as we have known, read with their pupils the geographical lessons, and sceptically add, "This is what the English say; but who can tell if there is a word of truth in it?" But notwithstanding this, the facts, young men *are* learning, if not the demonstrable theorems of European science, yet many of the scientific results. And one visible effect on their minds is an avowed conviction, that the old stereotyped ideas of their fathers cannot be true. This may manifest itself in the sweeping conclusion on the part of some that all religions are false, because they have seen their own fail when in contact with science, and they have not been instructed in any other. Sometimes it appears in the more easy and pliant form of a vague admission that all religions are true, without their seeing the necessity of complying with any religion or of forsaking any corruptions. And sometimes it is, by the Divine blessing, made a means of leading to inquiry, ending in an appreciation of the Christian evidences, and a conscientious and hearty reception of Christianity. Among the educated we have known a company of young men request the delivery of some scientific lectures by a Missionary; and when these lectures had been delivered a request followed for lectures on religious subjects. The effect of the weight which the officers of Government may add to instruction we may illustrate by the case of an uneducated chief, who, when some of his people, in their usual way, expressed their belief in the existence of Lanká, or Ceylon, replied, "But it does exist; for Jacob Sahib told me."

The cause of the extinction of infanticide and other crimes, and the cause of education, in this respect, stand on a parallel with the cause of Christian missions; and Missionaries therefore naturally and heartily throw their advocacy into the scale of Government. Those therefore weaken the hands of Government who throw cold water on

the efforts of the Missionary. Many, whether from motives of capitions hostility, or more frequently perhaps from inconsideration and neglect of having duly informed themselves on the subject, are wont to sit in judgment on missions as being slow in their progress. How easy to extend their principle of cavil, and to say, after half a century, and after all the wisdom and benevolence employed by the servants of Government for the suppression of infanticide, the utmost that can be shown is the diminution, but not the extinction of the crime. And after all the schools, erected and maintained by the Government, the utmost result is a handful of well educated or more frequently half educated young men, of so little influence in the community as to be forced to conceal their sentiments, and conform to customs which they despise or abhor. But if any one thought infanticide would be eradicated without perseverance and the long continuance of systematic means, his views must have been shortsighted, and non-inductive indeed. And if any think that education and her sister civilization should succeed rapidly, their hopes must end in disappointment. And, again, if any give up these noble schemes of good government, because a long summer of sultry heat, and patient labour, and fencing and weeding must intervene between the seed-time and the harvest, such an one is deficient in the faith and hope which are essential attributes of effective servants of government and of humanity. And if any be similarly impatient of the missionary's success in combining general knowledge with Christian knowledge and good morals,—for this is the missionary's legitimate object,—let other hands than his do the work, and men of higher soul be owned of God to bring honor on Christianity and on himself. The generation of Walker and Carey is gone; but the Christian Government and the Christian Church are entering into their labours. And if another half century should be added to that begun with their labours, before the full realization of the results after which they respectively aspired, let the good and noble spirited men employed in civil or sacred duties imitate their faith in the goodness of their cause, their buoyant hope, their indomitable perseverance; and let them thank God for their partial, and though seemingly slow, yet progressive certain success, and never doubt that humanity, which is the same in Káthawár as in England, will learn to abhor murder; that the Indian mind, under gradual development, will come to love knowledge; and that the moral nature of the Indian will love the religion which teaches good will to men of all castes and languages.

A fact fraught with encouragement to every friend of India is this, that success having been gained, there can never be a reverse. What may not the thakurs fall back into their revolting custom?



Do they not hanker after it? Are not their minds, in regard to it, like so many bended bows, ready to spring back the moment the tension is relaxed?—like young trees, ready to lift their heads, the moment the bending force is removed? “*Naturam expellas furca, tamen usque recurret.*” But the tension will not be relaxed; the Government will not recede from its commanding position. And if the old and gnarled Jádejá trees will not bend, and if the sapling will not retain its bend at once, gradual power, applied with skill, will succeed where brute force would fail. If moral coercion eradicate not the evil tendency to infanticide, nor awaken slumbering conscience, still it may remove temptations, by lessening marriage expenses, and may otherwise modify custom. As education advances, its recipients multiply; the educated element acquires increased proportion, and increased momentum in the community; the preponderance on the wrong side is weakened; and every deduction from that side is an addition to the other; there is a progress in society, even when not always tending to real improvement; it would not settle into the same state as before; it is not a tide, but a river. All analogies, derived from history, go to show that a people may be raised or depressed, improved or deteriorated, made or unmade, by freedom or oppression, by enlightened rule or by despotism or anarchy. We admit that by the one, nations recede into barbarism. But under a Government like that of India, no example of retrogression can be found. Forward, forward, is our word. Let the friends of education know this, and not despair. Their success against infanticide gives increased power against caste customs, ruinous holidays, infant marriages, and all other evils. So, too, the abolition of *sati*, the suppression of *thagát*, etc. gave power and motive to the friends of helpless infants. And all these are pioneers to the Christian missionary. He hails every such reformation as it comes. He has seen the removal of much over which he sighed; he has seen many clouds pass away from his morning sky; he has seen much support taken from idolatry. And, in the late Despatch of the Honorable the Court of Directors on education, he sees the principle now happily proclaimed, of laying the restrictive hand on religious instruction no more. There is sure and certain hope for the philanthropist and the Christian. Indian society is in a transition state. The old chaos cannot remain. God is saying, “Let there be light”; order is appearing; vegetation is covering the deserts; beauty is already beginning to display some of its efflorescence.

In referring to the suppression of infanticide as precursory to Christianity, we subscribe not to the popular but fallacious sentiment, that civilization must precede Christianity. We call this

sentiment fallacious, because it is based on the false assumption, that civilization is not itself a Christian element. This sentiment is refuted by all history. It is refuted by the New Testament, which abounds in precepts of the purest and most refined civilization : "Whatsoever ye would that men should do to you, do ye even so to them;" "In honour preferring one another;" "Provide things honest—honorable,—in the sight of all men;" "Let no corrupt communication proceed out of your mouth;" "Render to all their dues;" "Owe no man any thing but love." If philanthropists were to attempt the civilization of any people,—we shall suppose the inhabitants of the Laccadive, Nicobar, or other islands in the Indian Seas,—would they not teach them to read? But this has been the diligent practice of missionaries, wherever they have found permanent location. Would they not put books, full of moral lessons, into the hands of those taught, or learning to read? This too is just the practice of Christian missionaries. And what book of wholesome morality can be better employed than a collection of moral precepts drawn from the Holy Scripture? Take the Moral Class Book, used in the Government Schools, as an example. Though scriptural texts have been expunged from a vernacular translation of it, yet is the Bible the source of its moral lessons.

We can only afford space here to go one step farther, and say, that when the missionary teaches the doctrines of the Gospel, sublime in their simplicity, he is only teaching that great principle of love to God, springing out of God's love to man, from which all true morality flows; and for want of which fountain, the moral systems of the Hindus and others in this land are but stagnant marshes of death. Were any missionary to say, "I will not dissuade the people from infanticide, unless they will consent to listen to full Christian instruction; I shall not teach as much as I can, unless I can teach all I wish,"—he would be exposing himself to just rebuke. So also, if he were to say, "We shall not patronize schools, unless the Bible be forced on the pupils." But in justice let it be remembered, that the principle pleaded for all along was freedom of religious instruction. This freedom has now been promulgated. Let it but be fairly acted out, and in due progress the springs of crime will be drained away, and a surer barrier raised against its overflowing bitter waters, than all the marriage and birth returns, and the paid censors, and the fines, and the rewards resorted to in anti-infanticide proceedings. Let good principle run throughout, and all ulterior measures be its exemplification.

Christianity, we would here remark, is the only system of mercy. Brahmanism inculcated *satis*, and made the smoke of

their burning darken the land. Christians, long afraid of the monster, and unconscious of their power, and deficient in the faith that is their high prerogative, at last slowly put forth their hand, and he crumbled into dust before their touch. The Thags were dogging travellers to secluded places, appropriating their treasures, and depositing their remains beneath the sand of the jungle. But under English magistracy the assassins have been formed into an industrial village;—an example of how other moral nuisances of India, such as its sturdy Bawás, Gosavis, etc. might be converted into public benefits. The system of *Trága* or mutilation; to extort justice, or at least concession, prevailed, until British power established justice on a better principle. And in the crime, of which the suppression is now the subject, a greater evil than *Satt*, as being, if not more pernicious in itself, yet of more frequent recurrence,—a greater evil than *thagái* or *trága*, was here, until the true system of mercy was promulgated in the land. And if the Shráwaks did not shed blood, they raised no testimony against human immolation; and they founded no system of preservation. They lavished their *krores* of rupees on mountain temples; but mercy to man was first sounded in Indian ears by the Saxons from the West. To the various points of contrast, which we repeat not, between the British power and all that preceded it, let us add the press, with its teeming stores of literature; the civil hospitals at British stations; the school system extending itself, correcting errors and in like proportion gaining strength; and the preachers of the Gospel announcing peace on earth, good will towards man. Surely Britain has a noble mission, a high destiny, and surely too a solemn responsibility, in India. If she has done too little in the past, let her be the more vigilant now. If the immoralities of too many of her sons have presented her in a false light before heathen eyes, let the noble minded and enlightened men, who bear her name, learn that they may redeem and exalt her character. Commercial good to England may doubtless have followed her acquisition of empire in India. But in the good of India itself, Providence has given her a more glorious mission than military renown and national power. Britain's mission and the Christian's mission should be regarded as presenting the same object,—the reformation of India,—in distinct but harmonious lights.

Accordingly it is one of the indications of coming good to India, that philanthropic efforts and missionary efforts should have occupied the same position in Indian chronology. Had the spirit that has sent more than four hundred missionaries to India been awakened in the days of Moghal power, it must have been awakened in vain. And had it, within the first half century of its existence, met a re-

sponse in the breasts of those in the confidence of the Government of the country, there had been no grounds, on any principle of analogy, for its continuance. But as God has ordered matters, the nineteenth century has witnessed the consentaneous working of both. The one aims directly at the prevention of social evils, such as infanticide; the other endeavors to cut off the putrid springs of heathenism, whence all these evils flow. We must ascribe this harmony to the benignant arrangements of Infinite Wisdom; but the thankful acknowledgments of His arrangement may be accompanied with a reverent inquiry into their relations of secondary causality. And it is believed that many facts go to show, that God has blessed Christian missions in this land, and the Churches at home, for their sake, by making them the means or occasion of calling forth the Christian piety, that in its turn, lends them generous aid. The time was, when the natives of the land thought the English had no religion; and had not missionaries appeared among them, it seems reasonable to conclude that such would have been their impression still. The stories of the moral recklessness of Englishmen,—of some Englishmen,—are told, as things which the narrator fears to recite, lest he should not be believed. Be it that moral sores still fester on the surface of Society, there is now in action a *vis medicatrix* that does much to restore the British character, and beautifully contrasts with the sordid putrescence that covers the half-defunct carcase of Hinduism.

On this ground the missions in Káthiawár and Gujarát ought to be regarded in the most favorable light; while the disinterested zeal of Christians in the British Isles, who voluntarily tax themselves for their support, must, in the estimation of every impartial mind, stand above all eulogy. If they are only doing their duty, yet in the armies and the senate men are lauded for doing only their duty; and why should not the same principle be applicable here? The missionaries, though unaided from Government resources, are under the sanction of Government. And it is due to them to say, that in all their intercourse with the people, they are prompt in inculcating the substantial benefits which the country derives from Britain. Besides, the fact ought to be better known, that every individual converted to the Christian faith is thereby made a loyal subject of Government. The reason is palpable—under it he enjoys religious liberty, though sometimes he forfeits all his property; while he knows full well, that under any former or present native regime, he must either have become a martyr to his faith, or retained it under hypocritical compliance with the dark dogmas and customs of caste. If the missionaries and the agents of Government schemes in these provinces but understand their common interests and objects, no

collision can occur between them. The author of the book before us must have understood this principle clearly, for the system of corrective benevolence at work in Káthiawár and Gájarát appears to have weighed with him, in recommending the field of the Gujaráti language to the Irish Presbyterian Mission.

On one point, referred to in some of the earlier correspondence between Europeans and Natives, we have not deemed it necessary to occupy space. But if we were to overlook it entirely we might be misunderstood. One of the first deeds of renunciation of infanticide speaks of the Hon. English Company and the Gaikawád as having together "set forth to the Jádejás the true faith of the Hindus." And some of the appeals made to them do in reality contain language to this effect. Now there can here be no compromise. Truth and error never amalgamate. However excellent, and however benevolent the motives of the framers of these documents, we must confess they erred in this instance, as in some others. Brown, in his *Philosophy of the Human Mind*, speaks of the true student as looking back, in the light of philosophic history, on the operations of great intellects, even in quest of truth, and venerating the very genius which he demonstrates to have erred. So, while we can give no imprimatur to the errors of Walker and Duncan, and of more recent followers in their train, we can look with leniency on the state of mind that led them into those errors. They never dreamed of setting forth the Hindu faith as true, though they have admitted that the particular shástras referred to did contain some shlokas bearing against infanticide; and of these they may have eagerly availed themselves. An *argumentum ad hominem*, used by a missionary, is no admission of the truth of the statement with which he seeks to pose his opponent; but only a reference to the thing as admitted by that opponent, and as inconsistent with the position out of which he desires to dislodge him. So in this case, the gentlemen in our eye do not in reality inculcate the truth of the Hindu books; they simply say, "You assert their truth; now here is their decision on this point." Still, in these appeals to the Hindu authorities, there is something unhappy. It was misunderstood, as making the English apologists for the truth of the Hindu religion. "Not to do evil that good may come," is a principle of the inspired writings; and not to let our good be evil spoken of is another. An immediate advantage may induce the admission of that, which in its ultimate results would involve much evil. While the advocates of moral reformation should make every admission a fulcrum for applying the lever with more power, they should never rest that lever on a pile of sand. The eradication of infanticide is a glorious work; but even its results would be too dearly purchased at the expense

of contributing to uphold brahmanism ; and for this among other plain reasons, that if brahmanism were upheld, the consequent evils would still remain. If the tree were not hewn down, it would still produce poisonous fruit.

But passing on from these general remarks, we would observe that a much wider spread of infanticide than simply among Jádejá and other Rajput chiefs is brought to notice in some of the reports cited in the work under review. For an example, read the following from Colonel Pottinger.

" Sir John Malcolm came to Bhuj in March 1830. He made a speech to the assembled Jádejás on the enormity of the crime, and told them the English nation would force the East India Company to dissolve all connexion with a people who persisted in it. The Jádejás of course individually denied the charge, but they afterwards inquired from me how the Governor could talk so to them at a moment when we were courting the friendship of Sindh, in which child-murder is carried to a much greater extent than even in Kachh, for it is a well known fact that all the illegitimate offspring born to men of any rank in that country are indiscriminately put to death without reference to sex.\*

" I quite concur with Mr. Wilkinson, that infanticide is carried to an extent of which we have hardly yet a complete notion in India. The Ráo told me very bluntly, that he had just found out that a tribe of Mussalmans called ' Sammas,' who came originally from Sindh, and now inhabit the islands in the Ran, paying an ill-defined obedience to Kachh, put all their daughters to death merely to save the expence and trouble of rearing them. He has taken a bond from all the heads of the tribe to abandon the horrid custom, but, as he justly remarked, he has hardly the means of enforcing it."

Major Parr too says :-

" The crime of Infanticide is, I fear, by no means confined to either the Jádejá or Jaitwá population. I have heard assertions of its being extensively practised in Jaitwád, and amongst the Muhammadan tribe of Sétás."

Some of the late reports, as those of Major Wallace from the Mahi Kantha and of Mr. Fawcett from Ahmedabad, show also, that other tribes are involved in the crime, as the Marwádi and Ráthor Rajputs, the Kulambis of Gujarat &c., while the above statement of Sir H. Pottinger, and our author's note,\* intimate an extensive murder of illegitimate children of both sexes. And although it is cheering to find so much progress made in the suppression of Jádejá infanticide as to leave ground to hope that it has ceased in Káthiawár, yet strict attention to the subject must be there maintained; and perhaps the time is not far distant when inquiry will be carried farther than has yet been done. No reflecting mind can doubt that there is a latent spark under the ashes, which, if not smothered by continued surveillance, would

\* [The murder of illegitimate children is dreadfully prevalent, there is reason to fear, through all the native states of India. A few years ago a representation was made on the custom to the Bombay Government by an humble Dhéd of Káthiawár.]

flame out as lurid as before. In addition to this, any one knowing the state of the country will naturally ask, Are there no illegitimate children born? and if so, where are they? The Hindu doctrine, respecting woman forces on the benevolent mind the thought of a system of infanticide of which hitherto little account has been made. It may be well enough known that natives often charge their countrymen with procuring abortions. And the Hindu law sternly prohibits the re-marriage of widows; while according to their corrupt system of marriage in childhood, a girl may be a widow when yet of tender years. Are we to believe that these widows—not attributing to them the paramount impurity attributed in the Shāstras to the female character, but simply the common character of humanity,—are all of immaculate purity, beyond the reach of temptation, and the power of the designing seducer? Are we to believe that not one of them ever steps aside from the paths of virtue? This would imply a moral state realized only in the purest Christian communities, under the influence of Christian moral principles, though not always under the profession. Now the fact is, there is, ostensibly—no illegitimate progeny found among the native community, at least in these parts of India. Even the English word “bastard” has no equivalent term among the Hindus. Add to this the virtue of certain plants much in use among the natives. The popular name of widow, and of loose woman, are virtually the same. Who then does not see that after the crime prevalent among the chieftains of the land has been put down, there is a deep sea of moral impurity heaving under the floating ark of society? Will not the feelings of our readers recoil from this? But to recoil from the mere statement is of no avail. Truth, though harrowing, must be told. Rather let us ask, what new antidotes can we yet originate, ere the poison produce death? What barrier to this additional flood of iniquity still remains? We repeat our belief in a coming day, when the majesty of Christianity, stronger than all temporal power, will cleanse the land from this taint. In the meantime, here is an argument for forbearing to throw cold water on missionary agencies. Here is an evil not to be met or corrected by any agencies hitherto employed. If we were to set ourselves to originate measures, none could suggest themselves as more likely to succeed with it than those which aim at reforming the mind and heart. Secular education applies itself to the intellect directly; and to the heart only by a secondary influence. The missionary seeks to enlighten the intellect; but he never allows his endeavors to stop short of aiming at the heart. Until that fortress is taken his warfare is not done. Every instance of that conquest is an addition made to the moving force of the moral principle. Let new Walkers and Duncans pass with a strict scrutiny over this field; and let the

same wisdom, that devised fines and rewards in the other case, devise means for the emancipation and the protection of Hindu widows.

Various other matters in the work under review press on our attention. But we must close, by referring our readers to the work itself. To bring the subject treated of within the compass of a moderate volume was evidently a much more difficult task than might be supposed. And the selection of the more direct information and evidence from a mass of materials, was an undertaking that required much discrimination, and no ordinary amount of labour. These difficulties the author has admirably surmounted. He has put into the form of a permanent record, reaching to the present time, a mass of facts which must otherwise have passed into oblivion. But there are few portions of the history of man, more illustrative of his state and wants, than the one here developed. The book should be read by every friend of India, and of its education; and by every advocate of the diffusion of Christian truth. No one better furnished than Dr. Wilson with knowledge of Káthiawár, Kachh, Gujarát &c. could have been found to handle the subject, whether we speak of the natural history, the archaeology, or the social state of these provinces. We invite attention to the work; and think it a favorable circumstance that it should make its appearance under the auspices of the Bombay Government. It is well calculated to promote the great objects which the advocates of secular and of Christian education have in common. The author sustains in it his high reputation; and well merits public approbation.



the quiet homes of the several corporate bodies which together make up the University;\* each with its chapel and hall and common kitchen and library, snug common rooms paneled in oak, where that wonderful port wine is consumed after dinner; the cheerful house of the "Head," and the ranges of lodgings tenanted by the Fellows and Scholars and other members of the Society. Each College has its garden, be it small or great; those of St John's, New College, Worcester and Wadham are especially delightful; not like vulgar everyday gardens, but laid out in the old prim manner with ample space of turf, so smooth and green as fairies might choose for their revels, and where we have played many a tranquil rubber at bowls on bygone summer evenings. Old-fashioned fruits are still cultivated with characteristic conservatism in those quaint gardens; medlars, mulberries and figs; and frequent vines, planted perhaps under the Stuarts, contribute pleasantly to the common room dessert. It is strange after a bout in the battle of life, breathless, and it may be bleeding, and soiled with dust (alas would it were always *non indecoro*!) to hang up the shield for a space in those tranquil shades, and as the day declines, to listen to the bells ringing for evening chapel, as they did when we first submitted ourselves to College discipline. Most men become sentimental at finding themselves among the old sights and sounds—a weakness not unworthy, we hope, of a masculine character. Like a certain other ancient academy Oxford has also its groves—the walk of Wolsey and the walk of Addison—Christ Church and Magdalen. Scholars ever love to think walking:

Let my due feet never fail  
To walk the studious cloister's pale.

\* The bodily motion seems to stimulate the fancy and cure it of sluggishness, and, therefore, scores of young fellows in the heat of preparation for the Schools may be seen, sometimes solitary but mostly in pairs, pacing under the trees which kind scholars of other days—perhaps, who had themselves felt the want of this very comfort,—had planted for their use. *Serunt arbores quæ alteri seculo præsint*. What a graceful gift to posterity, flowers and fruit and shade! These are benefactions that cannot be misused, so that they be used at all, and we like to think of how much innocent pleasure they have given to successive generations, untainted by a single malevolent or sordid feeling.

\* We are aware that in theory the University is a distinct corporation, which existed before any of the Colleges and Halls were founded, and would exist though they were all to be dissolved to-morrow. Practically, however, the statement in the text is correct.

Probably every man remembers his University days as the happiest of his life. What an immense stride it seemed to be from school to college! How delightful all the little indications of his novel manhood and independence. The inexhaustible treasure of coin in the lad's pocket; the *loga virilis*, as he would classically consider it, on his back; his "rooms" with his name painted over the outer door in great staring white letters—his castle and sanctuary when it might please him to "sport the oak" on the world—his furniture and library all his own. *Miratur novas frondes et non sua poma*. How well we recollect the first breakfast—the College, "commons," consisting of a little round loaf and a section of butter deposited by the side of our splendid tea-pot, on the new tablecloth marked with our own initials; it was a marvel to see our initials on any thing besides godpapa's silver mug—where to be sure they were so flourishing and intertwined as to be perfectly illegible. Then the college servant's demure enquiry, what we "would be pleased to have out of the kitchen, as it would shut at 9 o'clock." Of course brawn was the thing to have. Oxford was famous for brawn; did not Wamba in *Ivanhoe* eat brawn?—a fine old Anglo-Saxon dish. The brawn came and went, and we are not sure that a legitimate antiquarian enthusiasm did not call for some of that famous beer which our College alone knew how to brew; or perhaps the beer was only ordered from a curiosity to see one of the tankards that had escaped the royal melting pot in King Charles's day—vessels of a quaint device, emblazoned with the arms of our founder (for whom we are bound to pray) and flourished over with Latin donatory inscriptions. The tankard of beer, we were told, came from the "buttery,"—what a picturesque middle-age word! It was necessary of course for a lover of Chaucer and Shakspeare to go and see its "hatch" through which the "manciple" and the manciples predecessors had served mighty ale any time these four hundred years. The stamp of that gray elder Age was upon every thing; on the crumbling grey walls, the carven armorial bearings of former prelates and nobles, the stately hall with its sculptured screen, raised dais, heavy tables, great brazen fire-dogs and portraits of our founders and benefactors—beginning with the quaint effigy of a bishop in mitre and chasuble and stole, who founded and ruled the house under a Tudor sovereign—the caitiff limner however had preposterously deformed the venerable man—and ending with that of a benevolent old gentleman with a bald head in a full suit of black and a white cravat, sitting before a table and (of course) in front of a red curtain, reading a handsomely bound copy of his own edition of St. Augustine's confessions: This was the last head of the society and founder of a scholarship named after him. Other figures, some with mitred heads, some like Cranmer

with trencher bonnets and stiff ruffs, some with moustaches and little black caps (Caroline divines), some with smooth faces, fine large bands and curly periwigs, who had subscribed for Dr. Sacheverell's Sermons perhaps in their time—filled up the portrait gallery of our worthies.

And not to this day have we shaken off the impression made on our imagination by the solemn interior of the Chapel, whither we were daily summoned according to immemorial College use. The screen, roof, stalls and desks were all of carved cedar grown dark with age. On the brightest day it was sombre, and the eye could hardly discern the gilded and emblazoned escutcheons which everywhere commemorated deceased members of the House. The sunbeams struggled through great windows, painted by Italian artists of the 17th century with gorgeous figures of saints and prophets. On the checkered marble pavement stood a brazen pillar surmounted by an eagle, also brass, the outstretched wings of the bird supporting the Bible, from which the lessons were read by the scholars of the foundation. All was costly, dim and quiet.

The library was in harmony with the antique hall and chapel—long, low, paneled with oak—none of your brisk modern whitewashed mechanic's institute reading rooms, furnished with eighteen penny compendia of science, "light literature for the rail" and the like—but a grave, solemn chamber, stored with folios bound in embossed vellum and clasped with brass, from the presses of Elzevir and Aldus—fathers, schoolmen, classics. Here was Luther's first Bible with miraculous woodcuts illustrating the Apocalypse; there the Editio princeps of the Psalter, printed by Faust and Guttenberg, at Maintz; there the first fruits of the craft of Caxton and Wynkyn de Worde. And the modern books were such as not improperly to stand by the side of the old volumes; Divinity, History, Philosophy, Mathematics, Lexicons and Grammars. There, moreover, guarded with jealous care were the special treasures committed to the learned librarian, rare manuscripts in Oriental tongues, Coptic, Hebrew, Syro-Chaldaic and Armenian—marvellous rolls of Arabic or Persian penmanship illuminated with matchless dexterity in gold and colors, and wrapped in silken envelopes perfumed with attar;—costly missals, breviaries and books of hours painfully written by monks in former times for the use of noble ladies and princes, containing miniatures exquisitely wrought on vellum, still fresh, and fair. This indeed seemed a sanctuary of study, where one might follow out trains of connected thought, and where might be elaborated one of those *heroic works* of literature that our languid readers and writers have no heart for at present. Thus everywhere we were met by traces of the learning, the industry, the religion and the munificence which a departed age had consecrated to the service of its successors. A new world was opened to us, grave

and venerable, yet genial; not decrepit, though hoary, but glowing with as intense a life as when Ingulfus studied Aristotle and Tully within its walls, and Vacarius expounded to its turbulent scholars the interdicted learning of the Civil Law.

Our present business concerns Oxford as it is. We are about to make some observations, which appear to us to be in season, upon the influence of English University education, especially of course in relation to the University with which we are best acquainted, and have thought fit to commence with a notice of the physical or material aspect of Oxford, from a motive that we will endeavour to explain. Every one is in the habit of speaking of the "tone" of this or that person, or of this or that society, with praise or censure,—meaning thereby, we believe, to refer to the general impression—produced by all the intellectual and moral qualities of the object contemplated as a whole. It will be remembered that it is a figure taken from music, the word *tone* meaning etymologically the tension or pitch of a harp string. So with strict propriety we speak of a low tone, a high tone, a pleasant or unpleasant tone, a vulgar or refined tone, and expect to be understood, though we should probably be at a loss if called upon to analyse the notion we wish to convey. It is indeed too subtle to be apprehended by mere intellect, and can only be tasted by the finer faculties which work in us without self consciousness,—faculties by the way that are more powerful in well-educated women than in men of *any* education. Now looking at our Universities, not with the eyes of schoolmasters who can see nothing but definite intellectual and moral discipline, but as men of the world, we recognise the fact, that they produce a certain *tone* in their members, more or less observable in this or that individual, but to some extent observable in all. There is a tincture of resemblance in all men who have been educated at the same university, modified infinitely by elements of variation, but still traceable, as a dim family likeness is sometimes discovered in remote branches of one family. We know very well that this university stamp is considered by parents to be one of the most desirable results of a college education. Otherwise it is inexplicable that they should spend their money in procuring for their sons a costly training which does not even profess to teach the rudiments of any profession, and drops a young man at two and twenty, furnished—such we believe is the common notion—with accomplishments of no possible use to himself or any one else. Very few fathers or mothers care to examine their young Bachelor of Arts in Greek or Mathematics, and would be rather appalled if he were to lard his conversation with scraps of moral philosophy. The quiet domestic conversation gives him no opportunity of exhibiting his newly acquired powers of thought, and yet we suppose his fond

mother and sisters are never weary of admiring the improvement made in their boy. He has brought back *something* from Oxford that they like ; it is the Oxford "tone."

We think the reader will now discover why we were at such pains to carry him through the halls and cloisters and gardens of Oxford, to make him go round about her walls and mark the towers thereof. There are sermons in those venerable stones, and the trees whisper counsel. The most hard and careless of men is affected in spite of himself by the atmosphere in which he lives ; but a sensitive high-spirited sympathetic lad drinks in external influences at every pore. His relish for life, and pleasure, and beauty is as keen as it is indiscriminating ; he yields up his whole nature to every impression made on his imagination. If worthy objects of adoration come not in his way, he will worship unworthy ones and believe them divine. If he may not kneel before the Heavenly Aphrodite, he will burn incense to the Pandemic Aphrodite. But his aspirations are naturally noble and genial. He is specially captivated by the generous virtues. His faith, confidence and reverence are easily excited. ~~He~~ has not yet learned to sneer. What wonder then that the contemplation of that magnificent structure, raised in honor of piety and learning, should at first profoundly affect him, and afterwards insensibly fashion his thoughts in a noble mould ? Who could cherish sordid thoughts in a place where every hall, and spire, and cloister, and grove recalls some deed of ancient munificence ? What taste would not be refined by constantly dwelling on dignified and beautiful objects ? Does it not seem natural that flippancy should be cowed when thus ushered into the grave presence, as it were, of antiquity, and melt into a modest reverent spirit ? We believe that practically the genius of the place does effect this more or less according to the temperament of the young student, and this is one great element of the Oxford tone.

Do notions such as these seem overstrained or fanciful ? They are at all events the result of observation, and are not now broached for the first time.

It has been said by more than one profound thinker of the present day, that Education can only be properly conducted under the shadow of antiquity ; a proposition that, with due reservation, expresses the opinion we have just put forth. A newly raised Lyceum, however perfect its organization and apparatus may be, necessarily lacks the authority, the persuasive power, the esprit de corps of an ancient School, as has been strikingly shown by the comparative failure of the admirably constituted London University College. No doubt this is especially an English sentiment, and quite alien to the spirit that till recently has presided over Education in Europe. But we believe that the soundest and most liberal foreign

writers on this subject are much dissatisfied with the moral atmosphere of their public academies, and have been led by experience to envy us that historic traditional prestige which has preserved the schools of Oxford and Cambridge from the degradation of Paris and Bologna.

It is no forced transition to pass from this topic to another of those influences which, overlooked or despised by schoolmasters, contribute to form the peculiar character of a "University man." We refer to the country life which he leads, and the country sports which he enjoys. If dwelling among stately models of architecture and the memorials of ancient religion and learning has a tendency to elevate the character generally, besides specially refining the taste—which we suppose no one will seriously deny—so the hunting, the cricket, the boating, the pedestrian excursions have a moral as well as a physical effect of their own. They obviously produce muscular strength, activity and health; but this is not all, though it is much. *They form a manly character.* We know very well that nine-tenths of our readers think so too: a love of field sports and an admiration for skill in them is bred in our English race. Our children love to hear how bold Robin Hood beat the covers of Sherwood, and drew such a mighty bow; how Shakspeare stalked squire Lucy's bucks; how young Nelson *would* stay to have another dash at the bear on the iceberg; how another of our nursery heroes killed poor Black Bess within sight of York's ancient minster; how straight the great Duke rode to hounds. We look kindly on sad young scamps, so that they be brave and strong and active. It is with a wicked pleasure that we read of my Lord Clive in his youth robbing the orchards of Market Drayton. The other day, a writer in one of our local papers, in a kind of despair, we suppose, at the prospect of an importation of attenuated literary Civilians, proposed that in the Government examination marks should be given for robbing orchards "*if it were done well.*" This is the protest of Nature—British nature—against the schoolmasters. Pale-faced puny students may tell us that science is better than muscle, and that knowledge is power; athletic games may be denounced as brutal by the luminaries of mechanics' institutes; Mr. Hallam, the philosophical and impartial, may sneer at field sports as relics of feudalism. We will not give them up. Knowledge is a fine thing, but it is not everything. The day comes when sane bodies as well as sane minds are required by the commonwealth. Our countrymen of all ranks are still famous for their size and strength. Military men say that English soldiers take up more room—so broad are their chests and shoulders—than any other troops in the world. We have read that at push of bayonet no enemy—not the French, the bravest of the

brave—can stand against their solid attack, and that a double thread of the invincible scarlet may be trusted to hold a position, where other soldiers no less brave would be arranged in deep columns. Who are the men, gentle and simple, that have more than sustained their country's reputation in the Crimea?—not schoolmasters' pet scholars. Dunces many of them no doubt. But we may be sure that they were riders and swimmers, oarsmen, shooters and cricketers; their sinews had gained stoutness, their lungs had learned to play by the heath, on the river, in the saddle. By these generous arts Englishmen have learned to triumph over foes as gallant as themselves, and it will be an evil day for our country, as it was for Rome, when they cease to be in honor.

We therefore rejoice in believing that, so long as our gentlemen go to the Universities, there is no fear of their turning out milksops, or losing too much of the British "fierceness and strength," which led to the comparison made by foreigners between our ancestors and their bull-dogs. The love of athletic sports absorbs every "freshman" at Oxford, as a passion for music seizes on every "~~Few~~" of Bonn and Heidelberg. Riding, rackets, cricket, and football secure their several votaries, and are pursued with the keenness and activity that plentiful emulation seems always to produce. But there is a sport which occupies the leisure of so many of the lads, and is so characteristic of both Oxford and Cambridge, that it deserves special notice—we mean boat-racing.

Those who visit Oxford at the annual "commemoration" bring away with them a medley of recollections of halls, chapels and libraries, orations, prize-poems, cathedral music, concerts, balls, breakfasts, luncheons, dinners, promenades, flower-shows, and what not, crowded into the brief span of three or four days,—quite a phantasmagoria of antiquities, gaiety, and solemn ceremonial. But however confused their after-impressions may be—to the despair of their undergraduate acquaintances, who cannot understand what difficulty there is in getting up—ambulando—the details of thirty colleges and halls, and the other contents of the little book which we are reviewing—they never lose the distinct and pleasurable remembrance of one spectacle which they attended during that bustling week. The day following the great commemorative ceremonial in the Sheldonian theatre, which has been the occasion of filling Oxford with a mob of visitors from all parts of England, in that delightful evening twilight of our northern midsummer, the whole population of the city, of every rank and age, by a common impulse, leave their houses and congregate on the banks of the Isis. Grave-diggers and heavy professors devote the unpractised gallantry of the cloister to marshalling lady visitors on board the barges that lie moored by the river side. The

youngsters muster in evidently diminished numbers; each college has sent the flower of its youth on a certain errand a mile down the stream; all eyes are anxiously bent in that direction: a gun is heard, and cheering which gradually becomes nearer; and at length a boat is seen moving up the river attended by a crowd on foot and horseback, then another and another, mere strips of plank they seem with a row of white backs above each, rising and falling in a slow measured cadence. When the leading bark is within a few hundred yards of the crowded barges, it abandons its leisurely processional pace, and draws away from its train of followers. The eight oarsmen, all in a uniform—snowy jerseys and straw hats with distinguishing colors—at a cheer from the steersman quicken without shortening their stroke, the good ashen oars rise and fall faster and faster, but always in justest time, sheets of foam fly aft from their flashing blades, and as if by mechanism the long slim craft (so light, notwithstanding its sixty feet of length, that two men can easily carry it) shoots over without displacing the water, and keeps the attendant horsemen on the opposite bank at a smart canter. The bands blow "See the conquering hero" with all their might, and universal cheering greets the "head boat of the river," as it takes up its station of honor by the side of a fine carved and gilded barge, once the property of some City Company, but now the headquarters of the University Boat Club. The next instant the second boat, followed at measured intervals by an interminable procession of racing cutters, solemnly, silently and with beautiful precision sweeps up the reach. It glides easily past the stationary head boat; but when just abreast, suddenly, as if by magic, up start the sixteen oars of both in mutual salutation, and a great cheer breaks out of generous boyish admiration quickened by the remembrance of many a race hardly won and lost, which gained each its place of honor. Poor lads! when they come to be barristers and parsons, literary men and senators, they will get over that simple trick of admiring their rivals. However, this is hardly the scene to provoke satire or cynicism. Boat after boat files up in like manner, saluting and cheering the heroes of the day, till thirty clubs or thereabouts have submitted their "style" and their eight-oar to the applause or criticism of the throng. There is something so charming, almost touching, in the spectacle of these manly youngsters, in the pride of their health and spirits, full of pluck and generous emulation as they are, that no wonder but it is well remembered by all who have once seen it.

Now it may be conceived that skill in rowing as in other arts demands training; the holiday exhibition is a pretty sight, but it is the index of hard work, and it is only in this point of view that we have called the reader's attention to the subject. Before



a boat's crew can be brought to the perfection required for competition in the College races, an amount of downright hard work, severe discipline and self-denial, must be gone through, by all engaged in it, as would astonish and indeed terrify the young men of other countries than our own. Set the stoutest and most hard-handed ploughman to work in an eight oar, and five minutes will chafe his hands, exhaust his wind, and give him a backache for a week. The youngsters go through a course of training like pugilists or pedestrians; rising early, living plainly, running, walking and rowing under the watchful eye of their captain—and all for what?—for honor, for the credit of their College, for the cheers of their fellow students. No other country can show such a spectacle but England—hundreds of young men, the very flower and hope of the land, future legislators, bishops, judges; the scions of noble houses, the owners of hereditary wealth, voluntarily submitting themselves to a discipline compared to which the treadmill is a light and easy occupation. The exertion of rowing a race is indeed enormous, and appears quite preternatural to those who are unacquainted with the effect of training on the human frame; but it is limited in point of time. The high spirited oarsman is cheered by the plaudits of a crowd, spurred on by emulation and the hope of victory. But this crowning effort is only the apex of a pyramid. The substance is beneath—it is the patient self-denial, during a weary period of discipline, the steady determination to achieve success by often repeated painful toil, that we regard with such sympathy as the peculiar property of our English youth. Compare with this manly chivalric sport the desultory fencing matches and childish brawls of German students, over their eternal pipes and beer; no wonder they have pasty faces and a heavy gait. Does any one know what is the life of the young students in Paris, and what kind of accomplishments they most affect, and whose applause they mostly value? We should like to take a denizen of the Quartier Latin and show him the boating on the Isis or the Cam. How he would shrug his shoulders and marvel at the eccentricities of these insulars. Meanwhile those who value for their sons the strong arm, the deep chest, and lengthened wind, the well-knit shoulder and sturdy back, the power of endurance that, joined to a resolute will, sustains the oarsman's frame under extremest "distress," will be thankful that there is still an asylum where hearty old English sport is honored, and prowess of body is frankly regarded as one of the qualifications of a gentleman. Physical Education is now attracting notice from those who at one time were inclined to think contemptuously of athletic strength; the increase of pale, bloodless faces among us, is too marked to be overlooked. Medical men recommend Gymnasia and would

make us strong and healthy by system. By all means let us have gymnasia if there be no other means, but Nature gave us the instinct of sport to effect this very end. It is at our own peril if we neglect her suggestions. The open air, the cheerful emulation, the variety of excitement will always make such amusements as boating, hunting, and cricket more effectual stimulants of health and strength than the aimless formalities of the palæstra, though the latter have their uses too where the desire of physical improvement has been already kindled in other ways, as mathematical studies which disgust and oppress beginners have quite a fascination for minds which have once begun to take pleasure in intellectual activity for its own sake.

We are conscious that in making these remarks on the share that the venerable associations of Oxford on the one hand, and its country life on the other have in forming the character of its students, we may have given pain to some minds that have been accustomed to look on education as a regular art like cookery or tailoring, in which success is proportional to the skill and care of the artist. We have referred to this class of critics as "schoolmasters," but should be sorry if any persons engaged in teaching were to think that we wish to sneer at their profession. We beg them to believe in our high regard for the art of imparting knowledge and for those who devote themselves to it. Still the greatest schoolmaster of our generation, the late Dr Arnold, used to lament with constant bitterness the almost universal estrangement between teacher and taught in our schools. He used, in language which perhaps is too strong, to attribute to boys a *hatred* for their schools and schoolmasters—the phrase must be corrected by the individual experience of each of our readers. That there is some truth in it we fear all will admit; but with a remarkable exception. Every boy educated at a *public school* remembers his schooldays and his tutor with pleasure and warm affection. Who ever saw an Eton or Winchester man, whose eyes did not brighten, after years perhaps spent in the world, at the mention of the ancient halls of Henry of Wykeham where he was nursed into adolescence? How he loves to dwell on those happy days! and, among the kind figures that throng on his recollection, not the least dear, not the least honored, is that of the tutor who cleared for him the avenues of learning. Why is this? How is it that the private schoolmaster—equally learned, gentlemanlike and kind perhaps,—cannot command this voluntary homage? The answer we believe is plain, though it has never been given. Public schools leave boys to themselves *as much as possible*, the schoolmaster leaves them to themselves *as little as possible*. He tries to train and mould, and prune and graft, and will not let the poor lit-

the tender plant grow as God meant. He has always that intolerably priggish quotation in his mouth:—

“Just as the twig is bent the tree's inclined.”

To be sure it is, and for that very reason the more you leave the twig alone, the better. We will have our trees straight and tall as far as may be. The magic of nature is beyond the ‘clumsy craft of your laboratories. She is ever at work labouring with a delicacy of touch that shames your heavy handling; and never, never with more loving and patient care than in the minds of children. As the rose learns to blush and the violet to breathe odours from sun and breeze, and shower, but how, we know not, so a boy assimilates the influences of the atmosphere which surrounds him, and if they are pure he becomes beautiful and modest and strong. The shepherd King of Israel, we are told, was ruddy and of a fair countenance; he was also the favorite of Heaven. Truly life in the upland valleys, breathing the keen mountain air and following the sheep track over the steep hill side, will nurture a lad simple and true and humble before the Highest, and comely to look upon, with clear eyes and fresh cheeks, but resolute withal against beast or man, and strong to smite. It is not without its lesson, that story of the pretty rosy child, no less high spirited than devout, who single-handed, in the name of the Lord, slays bears and lions in the lonely wilderness and blaspheming giants in the fore front of the battle, and whose fingers afterwards with equal energy strike the harp of the Psalmist and grasp the conquering sword. Do we suppose that the most respectable seminary for young gentlemen in the world, with a D.D. for head master and a troop of jailors instructed to watch the pupils night and day (the doctrinaire theory of a perfect institution), where drill sergeants and gymnastics supersede the necessity or the possibility of boisterous games,—a house without traditions—a play ground without nature—a leisure without freedom—a childhood without solitude—do we suppose that such a system will rear *men*? for we speak not of saints and heroes. O dreadful cruelty and injustice! Better, far better to let the flower grow wild—it will straggle and grow rank but it will be strong and fresh—than pot it and nurse it in an artificial atmosphere on stimulating soil till it sickens of its own refinement, and dies of the exertion of putting forth its monstrous blossom.

“How much healthier,” says a modern writer speaking of the highly artificial education at present in fashion, “to wander into the fields, and there with the exiled Prince ‘to find tongues in the trees, books in the running brooks!’ How much more genuine an

education is that of the poor boy in the poem\*—a poem whether in conception or execution one of the most touching in our language, —who, not in the wide world, but ranging day by day around his widowed mother's home, 'a dexterous gleaner in a narrow field,' and with only such slender outfit as

'The village school and books a few supplied,'

contrived from the beach, and the quay; and the fisher's boat, and the inn's fireside, and the tradesman's shop, and the shepherd's walk, and the smuggler's hut, and the mossy moor, and the screaming gulls, and the restless waves, to fashion for himself a philosophy and a poetry of his own !"

We believe that the sympathies of the majority of our readers have accompanied us hitherto ; for we have appealed to instincts which are common to all natural, healthy minds,\* and which can only be smothered by the tyranny of theories. We now wish to direct attention to the undisputed and indisputable benefit derived by the Oxford student from the large numbers of young men of his own age and collected from all quarters, with whom a university life brings him into collision. It is recognised immediately on comparing him with the élèves of private tuition. He is a man ; they are children. He is master of his knowledge ; their knowledge is master of them. They may have *read* more books ; he is more able to *write* one. He is modest and assured ; they are bashful and conceited. The secret is not hard to discover. They have only been taught by a schoolmaster ; he has been disciplined by his schoolfellows. Reciprocal instruction—this is the great intellectual fruit of Universities. Tutors and Professors sow seed broadcast, but little fructifies. Boys learn from each other with wonderful rapidity, not so much knowledge, as the use of knowledge. Frank, sympathetic and vain—delighted with the consciousness of growing mental power, proud of their daily acquisitions, of which they exaggerate the value—they are ever exchanging opinions, hazarding theories, propounding questions. The lads, who in lecture are so demure and even listless, who in their essays and poems deliver themselves of such safe platitudes and pompous plagiarisms, are quite other beings among themselves. Hear them discuss the varied questions of philosophy or politics ! what fiery young realists and nominalists, and Lockites and Kantians ! What life they breathe into those dry old bones ! How fervent their admiration, how uncompromising their hatred of Pericles or Cleon, Hildebrand or Frederick, Charles or Cromwell, Fox or Pitt ! Was ever Tory so staunch, was ever Whig so constitu-

tional, was ever Radical so bitter, as the Tory, the Whig, the Radical of one and twenty? Sylla was a trimmer to these vehement youngsters, Dominic a poor creature, Robespierre a halter between two opinions. Perhaps there is hardly an undergraduate in the University who would not tell us that he has unalterably made up his mind on every disputed point of history, politics and philosophy, and is prepared to defend his views against all comers. Ridiculously crude as these juvenile disputations must needs be, still it is obvious that they ensure an immense amount of intellectual activity, that no exertions of a teacher will call into existence. They call for dialectical dexterity, copious oratory, and ready wit; they give or tend to give presence of mind, a power of rapid generalisation, and on the other hand a general practical habit of dealing with facts, a command over resources of illustration and example; and conduce directly to produce that nervous masculine logic which distinguishes a speech in the House of Commons from an oration delivered to an Academy. It would be ridiculous to say that a young man is likely to be conducted to sound opinions by this frequent fencing and wrestling with his equals, but he is certainly led some steps on the road. His opinions will at all events be coherent and clear. He knows by experience the weak points, and the strong points, and the debatable ground of his philosophy. He becomes candid from the mere habit of tracing doctrines to their results. "His disciplined intellect preserves him from the blundering discourtesy of better, though less educated, minds, who like blunt weapons tear and hack instead of cutting clean, who mistake the point in argument, waste their strength on trifles, misconceive their adversary, and leave the question more involved than they find it."

Again, a whole troop of moral defects, obtrusively visible in persons brought up in small societies, are cured, or at least much subdued, by the constant collision of mind between a young university man and his equals. The boy bred up by a private tutor or in a small school is astonished and abashed to find that he is not in harmony with his new associates. His favorite phrases, his marked manner modelled on the scanty examples which he has hitherto had presented to him, his tendency to lay down the law as he has ever heard it laid down, expose him to comment more or less satirical from every undergraduate he meets.

Oddities, eccentricities, hobbies, cease to be possible in him. They are overwhelmed with the frank sarcasm that youngsters always have at command, and dispensed so liberally on unsocial qualities. In after life we are inclined to sigh for the simpler etiquette, which allowed and indeed enjoined the annihilation of a bore. Mr. de Quincy, who passed through Oxford without throwing himself at all (poor

follow, he was straitened in means,) into the social spirit of the place, but went and returned a hermit in temper, relates with great good humour a little piece of discipline to which he was subjected in his early College days. It will illustrate our remarks.

He introduces his anecdote by asserting—and we can confirm his statement to the full,—that “in Oxford, at least as much as in any other place I ever knew, talents and severe habits of study are their own justification; and upon the strongest possible warrant, viz. my own experience in a College, then recently emerging from habits of riotous dissipation, I can affirm that a man who pleads known habits of study as an excuse for secluding himself and for declining the ordinary amusements and wine parties, will meet with neither molestation nor contempt.”

It had been once delicately hinted to him, that the habitual neglect of his dress was carried to an unbecoming extent :

“A reproof so courteously prefaced I could not take offence at; and at that time I resolved to spend some cost on decorating my person. But it always happened that some book or set of books—that pass on being absolutely endless and inexorable as the grave—stepped between me and my intentions; until one day upon arranging my toilet hastily before dinner, I suddenly made the discovery that I had no waistcoat which was not torn or otherwise dilapidated; whereupon buttoning up my coat to the throat, and drawing my gown as close about me as possible, I went into the public ‘hall’ with no misgiving. However I was detected; for a grave man with a superlatively grave countenance, who happened on that day to sit next to me, but whom I did not personally know, addressing his friend sitting opposite, begged to know if he had seen the last Gazette, because he understood that it contained an Order in Council laying an interdict on the future use of waistcoats. His friend replied with the same perfect gravity, that it was a great satisfaction to his mind that his Majesty’s Government should have issued so sensible an order, which he trusted would be soon followed by an interdict on breeches, they being still more disagreeable to pay for. This said, without the movement on either side of a single muscle, the two gentlemen passed to other subjects.”

Far more severe discipline than this is administered to the conceited or pretentious newcomer. Rank and wealth confer no exemption, but on the contrary rather seem to excite the academical democracy to unusual severity of criticism—for public opinion in the University is thoroughly English; it sympathizes with high spirit; it admires attainments of every kind, from science and scholarship to cricket and the “use of the gloves;” it has a generous regard for good blood and good breeding; but it will not tolerate insolent assumption in millionaire, marquis, or bel esprit. It has a manly pity and kindness for the poor scholar who is found to devote himself to solitary toil, but it insists that he shall preserve the habits and port of a gentleman. What a fine corrective of those minor

faults—as they are reputed—which in after life so commonly ruin a man without his knowing why. We suppose every one is acquainted with half a dozen specimens of the what are called *impracticable* men—clever fellows very likely, full of activity and bustle, plausible in speech, able, as their friends say, to do anything if they gave their minds to it, and yet as a fact they always fail; and there is the *stamp of failure* on all their undertakings. Unobservant critics look on with pity and wonder at the constant run of ill luck that mars the career of a man of such shining abilities, nor discover, till the grave has closed upon a broken heart, wasted talents and energy misapplied, how strict a law of nature presided over the destinies of his inauspicious life. Ungovernable egotism, nurtured in a small circle of admirers or relatives, a violent habit of self assertion, overweening self-confidence, an undisguised contempt for the opinions of others even the ablest and the best, a rude acrimonious temper in debate, a stubborn adherence to formed opinions, an angry repudiation of compromise, a conviction that the world is in a conspiracy against him—these are some of the badges of the “unsuccessful man,” and these are the characteristic defects of the hermit.

For a boy born with these infirmities, the benefits of a public School and University education are indeed priceless. With more or less roughness, his schoolfellows and fellow students thrash him and bully him, and snub him, and laugh him into a more social and modest frame of mind. His arrogance is confounded by the presence of his superiors in talent, in acquirements, and in every other particular; he finds that each exhibition of conceit entails such speedy and disagreeable punishment, that as a mere matter of policy it is advisable for him to conceal his self-esteem; he is made to perceive that a certain *deference* to others is the only means of acquiring *influence* over others; that loud self-assertion directly tends to produce distrust in the listener, and never admiration; that a placable temper is not only a comfort but a necessity to those who would succeed in affairs; that the world, like a true mirror, reflects smiles with smiles, and frowns with frowns. What academy, what philosophy teaches these weighty practical truths? None. They can only be learned by painful bitter experience in actual life. But public schoolboys and University men have the enormous advantage of gaining much of that experience at an age when they are still easily moulded, and when, as infants learning to walk take no hurt from innumerable tumbles, so all their slips and humiliations are less painful and more easily remedied than in the after crush of life and breathless struggle with the world.

“I protest,” says the writer we have already quoted, “I protest

that if I had to choose between a so-called University which *dispensed with residence* and tutorial superintendence, and gave its degrees to any person who passed an examination in a wide range of subjects, and a University which had no professors or examinations at all, but merely brought a number of young men together for three or four years and then sent them away, as the University of Oxford is said to have done some sixty years since ; if I were asked which of these two methods was the better discipline of the intellect<sup>2</sup>—mind, I do not say, which is morally the better ; for it is plain that compulsory study must be a good, and idleness an intolerable mischief ; but if I must determine which of the two courses was the more successful in training, moulding and cultivating the mind, which sent out men the more fitted for their secular duties, which produced better public men, men of the world, men whose names would descend to posterity,—I have no hesitation in giving the preference to that University which did nothing, over that which exacted of its members an acquaintance with every science under the sun. And, paradox as this may seem, still if results be the test of systems, the influence of the public schools and colleges of England, in the course of the last century at least, will bear out one side of the contrast as I have drawn it. So far is certain, that the Universities and scholastic establishments to which I refer, and which did little more than bring together first boys and then youths in large numbers ; these institutions can boast of a succession of heroes and statesmen, of literary men and philosophers, of men conspicuous for great natural virtues, for habits of business, for knowledge of life, for practical judgment, for cultivated tastes, for accomplishments, which have made England what it is."

Yes, it is true ; the free bracing air of such schools as Eton and Oxford nurtures the strong, but nips charlatanism in the bud. An impostor is discovered at once, and crushed without mercy, but the modest, but the brave, and the sound-hearted, graduate and achieve honors as durable, if not so brilliant, as the men of wit and learning. They are not mentioned in "*The Times*" among the first and second class men, but they carry into life the sympathy and confidence of their contemporaries. Their names are not recorded in the "*Calendar*" for the envy and admiration of future academical generations, but they are held in constant regard by men whose regard is the most worth having, and we say with a full recollection of facts which support the statement, that a boy who passes through his college days without literary or scientific distinction, but with a reputation for sterling honesty, modesty, steadiness, and good nature, will in after life find friends to help him where he least expects it. Like the



prince in the Fairy tale, he will be ministered to by hands of invisible beings. In distant colonies or in the bustle of London, as Freemasons boast of their craft, he will find brothers and kindness, and when he is astonished at some stranger's help or some "wind-fall" for which he cannot account, he little thinks of the generous recollection in which his unassuming merits are still held by the companions of his youth. "I knew so and so at Oxford," some one may have said. "*he was sitch a good fellow.*" Friends made in the world do not cherish such long memories.

It remains to consider the direct, conscious action of the University as such. We cannot treat this part of our subject as it deserves, not only because of the great length to which a full discussion on so large a topic would run, but because we do not feel ourselves competent to handle it. The reader will be aware that the constitution and studies of the University have recently been the subject of debate and legislation, and are still oscillating under the effect of that impulse. No one writing in this country can pretend to unravel the intricate questions that are vexing the ablest thinkers on the spot; we cannot be supposed to be *au courant* with debates that are conducted by word of mouth and not on paper, and with issues that shift from day to day; such topics can only be thoroughly discussed by persons who live in the atmosphere of the controversy itself, and are for ever correcting their views by comparison with those of the opposite side. We have had enough of crudities on this and kindred subjects from those members of the press whose inexorable necessities compel them to talk dogmatically on every conceivable topic at five minutes notice. The prophets prophesy falsely; and the people *will have it so*. It is their vocation; and, if their views are shallow, and their arguments *ad captandum*, it forms their vindication. The public has no right to expect any thing better of them. We could plead no such excuse for filling these pages with pert decisions based on imperfect information. We decline the easy triumph of penning pointed *grades* against the "bigoted supporters of worn out systems," or vague and specious praises of "progress and enlightenment." Nothing is more offensive to our apprehension than the airy flippancy so much in fashion, that affects to answer weighty questions with an epigram; unless it be the presumptuous ignorance that sneers at the learning which it does not itself possess. We have full confidence in the spirit that is at work in our University men, whether of the cloister or the senate, and have no doubt that the changes necessary to bring Oxford more into harmony with modern sympathies will be conducted with that happy mixture of caution and boldness, that in political matters has usually distinguished our countrymen.

We only propose now to advance and illustrate a few propositions relating to the University system, about which there is no dispute among moderately well-informed persons, but which are not understood or not regarded by many who take upon themselves to lay down the law on these matters. We suppose for instance that if some splenetic savant were to upbraid Oxford for neglecting her solemn duty,—the advancement of scientific discovery, the production of great works of erudition—there would be an ample audience to cheer on the imposing invective. But it would be a mere blunder. The object of a University is *not the advancement of learning*, but *Education*. Learning is promoted, Science is investigated by societies that are formed for that special end, or still more commonly by solitary labourers. Discoverers like Pythagoras, like Roger Bacon, like Isaac Newton, shrink from the turmoil of life into caves and towers and lonely observatories. The large active sympathy, the strong corporate life of a University is quite alien to that profoundly meditative spirit. The talent for teaching is seldom found united with the genius of research, and the *practice* of teaching actually impedes the usefulness of the scientific pioneer. A division of labour becomes therefore necessary; and it is clear that to inveigh against a system of education because it does not tend to advance science, would be as reasonable as to complain that a carving knife makes a clumsy, inefficient razor. Oxford, therefore, must be viewed as a great school, and if, in fact, she is also a seat of learning, that is by the way, and not in her University capacity. She professes to teach; what does she teach? Before answering that question let us examine her staff of public lecturers as they are enumerated in the Oxford Calendar. It is impossible to conceive a more cyclopædic liberality of professional chairs.

First in dignity come the Regius Professors of Divinity, of the Civil Law, of Medicine, of Hebrew and of Greek, who owe their existence to Henry the VIII. and their stipends to the spoils of dissolved abbeyes: To these in 1724 George I. added a professor of Modern History and Modern Languages, and Queen Victoria, thirteen years ago, two more—the Professors of Pastoral Theology and of Ecclesiastical History. Divinity is also represented by Dean Ireland's Professor of Exegesis and the Margaret Professor, who was first endowed with a pension of twenty marks by Margaret Countess of Richmond, mother of Henry the VII. Moral and Natural Philosophy have had each their Professor since the beginning of the 17th century. From the same era date the Professorships of Geometry and Astronomy which are due to the liberality of Sir Henry Savile. William Camden, Clarenceux King-at-Arms in 1622, devised a rent charge on the Manor of Bexley in Kent, to the

University "to this end and purpose, that the Chancellor, masters and scholars (such is the technical description of the Corporation), and their successors, shall from time to time for ever, after the death of the said William Camden, maintain within the University aforesaid *one Reader*, who shall be called the *Reader of Histories*." The condition has not been observed; for at this day the "reader" is called the Camden Professor of ancient history. Medicine and its kindred sciences are amply illustrated by Tomlin's Prælector of Anatomy (this office is always held by the Regius Professor of Medicine), Lord Lichfield's Clinical professor, the Abdrichian professors of the practice of Medicine, of Anatomy and Chemistry—the last of which is at present held by Dr. Daubeny—and by Lee's Lecturer in Anatomy. Natural Philosophy, Experimental Philosophy, Mineralogy, Rural Economy and Geology are lectured upon by their several "readers," Dr. Buckland illustrating the last named science. The languages of the East are committed to the Laudian professor of Arabic—the creation of Archbishop Laud—the Lord Almoner's reader in Arabic, and the Professor of Sanscrit named after "the late John Roden Esq. Colonel in the Honorable the East India Company's Service, who bequeathed the whole of his property to the University of Oxford for the purpose of promoting Sanscrit literature, being of opinion that a more general and critical knowledge of the Sanscrit language will be a means of enabling his countrymen to proceed in the conversion of the natives of India to the Christian religion, by disseminating a knowledge of the sacred Scriptures among them, more effectually than all other means whatsoever." Is it necessary to add for the information of Indian readers that this professorship is held by Horace Hayman Wilson of Exeter College? Political Economy and Logic are read by a Professor and a Prælector. The Civil Law, as we have seen, boasts a Regius Professor; the Common Law of England is interpreted by the Professor on the Vinerian foundation whose earliest predecessor was William Blackstone D.C.L. fellow of All Souls, afterwards Sir William, and one of His Majesty's Justices in the Court of Common Pleas. The famous Commentaries consist of the lectures delivered by him as Mr. Viner's professor. At the beginning of the 18th century "Mr. Birkhead, a barrister of the Inner Temple and D. C. L. sometime of Trinity and afterwards fellow of All Souls," founded a Professorship of Poetry, which has been held among others by T. Warton, Bishop Louth, Dr. Milman and Mr. Keble. A professor of Anglo Saxon also vindicates the liberality of the last century, unless indeed we complain that by the terms of its foundation "no native of Scotland, of Ireland, nor any of the Plantations abroad, nor any of their sons, nor any member of the Royal

or Antiquarian societies, shall be capable of being elected to the professorship." Richard Rawlinson of St. John's College, who was so anxious to preserve our Anglo-Saxon, moreover clogged his bequest by declaring that his Professor should be an unmarried man—a cross, peevish, old gentleman he must have been. Finally in 1626 William Heather, Doctor in Music, founded a professorship of his science, worthily held at this day by Sir Henry Bishop, and made provision for the practice of Music, establishing "a fund for the payment of a choragus or præfectus musicæ exercitationis," who is now Dr. Stephen Elvey, a fine organist and learned in his profession.

Poetry and Music alone of the Arts are enthroned in academic chairs at Oxford, but by a recent benefaction, aided by funds from the University chest, a range of fine Italian galleries has been built for the reception of pictures and sculpture—in which among works of less pretension are a considerable number of original drawings by Michael Angelo, and Raffaele, once the property of Sir Thomas Lawrence, and of course of great value, together with a collection of casts from the works of the late Sir F. Chantrey, presented by his widow to the University. Attached to these galleries, and forming part of the same design, is the "Taylor Institution," founded for the encouragement of the study of modern languages—the establishment of which comprises a professor (Dr. Max Müller), whose duty it is to lecture on the philosophy and literature of some of the principal languages of Europe, a French and a German teacher, both foreigners. The number of the languages taught is to be increased hereafter.

Truly an extensive knowledge shop, with Museums, Observatories, Hospitals, Libraries, Lecture-rooms, Laboratories, Apparatus attached—booths and counters where all manner of wares are displayed. Yet, strange and even lamentable as it may seem, these learned persons mostly harangue small audiences, and those seldom composed of the younger class of alumni. For the genuine Oxford education is Tutorial, not Professorial. Graduates frequent the lecture rooms in search of their favorite lore, but the University does not consider that attending lectures is the best mode of learning the peculiar studies of her curriculum, and the undergraduate, during the greater portion of his career, is kept at work in a narrower circle of pursuits under the eye of his College tutors. A great outcry has been raised, and by no means a vulgar outcry, against the revolution that has thus shelved the Professors. We believe on the other hand that it is natural and, in the main, right, that it should have occurred. It is a sacrifice of the interests of the few to the interests of the many. Notwithstanding the rage, as we may call it, that exists at the present day for learning everything by lectures, we are

persuaded that it is a monstrous delusion. The system of delivering orations to students was invaluable—indeed indispensable—in those times when there were no books to be had, but came to an end, and ought to have come to an end, except in rare instances, when pupils could procure books. The mere effort of attending to the lecturer absorbs so much energy, that the listener has none to spare for mastering the subject. To follow a connected train of thought, is almost impossible. Quick minds and slow minds are forced to travel the same pace. The tyrannous system admits of no pause for breath. It is an intellectual treadmill. Let not people deceive themselves by fancying that the pleasurable excitement of hearing an eloquent sermon, or attending a séance of some clever experimentalist, is *educative*. It is not by such easy slipslop methods of acquisition that men are made capable of independent thought, but by a much sterner discipline; by poring over subtle texts; by rigorous self-examination; by repeated lonely struggles with difficulty; by answering questions; by asking questions; by masticating and not bolting our knowledge. A passive reception of facts from a lecturer (and how many of the audience do any more than passively receive facts) produces the least possible improvement of the intellect; it calls for no exertion of reasoning, of memory, of comparison. Knowledge so acquired falls on the listener like snow, either to melt in an hour, or to accumulate in thick, cold, dreary drifts that chill him into torpor. It is necessary to speak plainly on this subject for the tide is rising and will yet rise. The vanity of the Professor and the indolence of his audience conspire in the same sense.

We fear that the lecture system is already producing a languid desultory class of minds, smatterers in acquirement, and incapable of hard thought. Oxford is still, and we pray may ever be, one of the strongholds of more solid and thorough teaching. Her motto is *non multa sed multum*, and whatever enlargement or modification of her curriculum be conceded to the progress of society, we hope she will always maintain the principle that whatever is done at all should be done thoroughly; each undergraduate throughout his career shall be subjected to *individual* inspection and examination as now in the tutor's class room; probed with questions, compelled to translate aloud and on paper, to compose in foreign languages and his own; to analyse and combine his knowledge as he acquires it. It would be nothing less than a national calamity, if, in deference to the aspirations of eloquent savans, we were to supersede this homely but thoroughly practical discipline, in favor of the more brilliant teaching of the lecture theatre.

To turn from the mode to the substance of academic studies.

The University professes to give a *liberal* education. It is worth while to consider in what a liberal education consists. Probably the reader will be startled (so little are we solicitous of clearing our ideas on even the most familiar subjects) at hearing that the word *liberal* is opposed to *useful*, and that a liberal education is that which does not contemplate utility as its end. The first notion of "liberal" in both the learned languages is, that which belongs to the freeman, as contrasted with that which is servile, just as we now-a-days speak of the education of a "gentleman" as synonymous, or nearly so, with a liberal education.\* The slave, it will be remembered, is a "living instrument," and the servile education is that which is exclusively directed to making him a perfect instrument. The perfection of an instrument has reference solely to its peculiar end, and if it is unfit for that end it exists as an anomaly in the universe. So, if the slave is not good for his work, he is good for nothing quâ he is a slave. To be servile is to be instrumental. The words "use" and "useful" contain the same notion; they do not represent an end, but a means to an end, valuable solely with reference to that end, and mere rubbish when unavailable towards it; like the doubloons discovered by Robinson Crusoe, "*means indeed*"—as we in the world call money—but to the solitary seaman, means without a corresponding end, passages that lead to nothing. So whatever is called useful is necessarily conceived of as useful for something else, and not as a final good *in se*. An useful education therefore is that which selects exclusively those studies that are directly applicable to the needs of the scholar in after life, in other words is a professional education. The schoolmaster may take more or less broad views of *what* will be useful to the pupil in his business, but in so far as he professes to give a useful education, he is logically bound to test every study by its practical bearing on life. This we suppose is the popular view of education. "You cannot begin too early to teach a young man his business" is the maxim of nearly every illiterate person. The nations of this country have only in the very rarest instances advanced beyond it.

A liberal education on the other hand works precisely on the opposite principle, and contemplates its pupils as *men not professional men*. Liberal studies are, those which are pursued for their own sake, and not as means to any ulterior advantage. But a distinction is necessary. Some arts and sciences may be learned by one person in a liberal, by another in a professional manner; for instance, jurisprudence is a liberal study to a scholar; a professional, servile, or

\* *ἐλευθερίος*, liberalis. Liberal studies are also called *ingenue artes*, *ingenious* meaning free born.

useful study to a lawyer; to the former it is a valuable acquisition, though nothing comes of it beyond itself; to the latter it is a means of making money. Yet jurisprudence is properly held to be a liberal study, because it is capable of being set up as an independent good. On the other hand, shoe-making and calligraphy are only useful or servile arts, for they are solely valuable as conducing to ends beyond them. Though the most fundamental changes should be made in society, the study of jurisprudence would still retain its value as a magnificent means of strengthening and expanding the mind; but it is obvious that the process of scientific discovery may consign the two arts we mentioned to the absolute neglect which now enshrouds bear baiting and judicial astrology. We ought really to apologise for dwelling on such obvious truths, were it not that they are singularly left out of sight by persons who venture to talk, and very dogmatically too, on University studies. Nothing is more common than for an uneducated thinker to employ his shallow wit in exposing the inutility of classical (suppose) or logical studies, and then to enquire with an air of triumph, why don't you teach a man things that will be useful to him in after life? The argument involved in this taunt is so clear and simple, that it appeals, as we say, "to the meanest capacity." It is perfectly plain that a knowledge of conic sections is of no value towards the composition of a sermon, that the possession of the whole *Poetæ Scenici* will not give a hint how to design a club house, that no moral philosophy, however enlightened or profound, will tend to remove the difficulties of making a revenue settlement; and yet these "useless" studies have been in vogue for centuries; never lost sight of since they were first instituted, cherished as a vestal fire through the gloom of barbarous ages, and most honored in the most illustrious epochs of the greatest nations; nor is there any sign of their decay. Rudely assailed in that revolutionary fervour that lately passed over Europe, they have not only stood their ground, but have gained new votaries; and throughout the United States of America temples are daily rising where the lofty disinterested worship of Learning is zealously performed, without hope of fee or reward. So that the "plain" argument, that so successfully appeals to "the meanest capacity," may be suspected of being a little too easy to be quite satisfactory,—a suspicion by the way that may always be reasonably entertained of over-conclusive, or as they are called, "knock-me-down" pieces of reasoning. We beg to offer then to the "meanest capacity"—which in this case may be taken to be that of the logician who propounds, as well as of the good natured listener who is convinced by that plain and easy argument—the following considerations in favor of a liberal education.

What is the use of professional labour? to make money. What is the use of money? for its very name,—“means”—as we said before, shows that it is not a final good. Happiness, we suppose, would be a general reply. Now as money is confessedly not the sole avenue to happiness, it follows that Education is incomplete which regards only professional accomplishments.

Again; the most industrious professional man is not always engaged in his vocation; for a considerable portion of his time he is a man and member of society, and looks forward to the period when he may live *entirely* for himself and society. Therefore that education is incomplete which has respect only to his employment in his professional capacity. This may seem too dry and dialectical a treatment of the question, but we offer it as a set off to the “plain and easy” argument for exclusive professional training before mentioned. It may be viewed more broadly.

Men of large and penetrating minds observe with dismay the present tendency of our civilization to *specialize* mankind. So urgent is the stimulus of competition that we are forced to devote our whole energies, to sell ourselves into slavery, in fact, to one business, whatever it may be. We ~~are~~ becoming mere engineers, mere lawyers, mere merchants and so forth. Division of labour, which Political Economy—that jealous sovereign who bears no rival near the throne—tells us is an absolute good, is splitting up professions and splitting up men, into fractions. A medical man, to succeed, must hold himself out as an oculist, or aurist, or as specially great in the treatment of consumption; a lawyer must acquire a fame for dealing with patent law, or railway law; an engineer must persuade the public that he understands more than the rest of the world about the constructive use of iron, or the unsavoury mysteries of sanitary drainage. We English, with our “practical” instincts, as we hold them, have led the way; our manufacturing success depends entirely on the secret. The reader may remember M. Michelet’s amusing denunciations of the horrid factory system, that devotes a living soul to a life of pin-making, and not even making whole pins, but the head of a pin, or the shank, or sharpening, or polishing of pins. Truly a good way of making pins, but not of making men. This is the extreme case, but a true type of our present tendencies. Hence the narrowness of mind so visible in our literature and conversation. We are so intent on a portion of the world’s mechanism that we have no time or fancy to step back as it were and contemplate the whole. One of us measures the universe by cotton; another (and a great many) by £ s. d.; a third by poetry; a fourth by one of the natural sciences; a fifth by some theological system, and so on. Men of one idea are multiplying



upon us. Warren does not in the least exaggerate the truth, when he makes old Mr. Quirk employ himself in church during the second lesson, in reflecting whether the unjust steward ought to have been proceeded against for embezzlement or breach of trust. We remember a civil engineer who stated to a committee of the House of Commons, that rivers were intended by God to fill navigable canals; an accomplished lecturer on political economy some years ago shocked the University of Oxford by declaring that his pet science was *the great* means of moral and religious improvement; and a fervent divine afterwards restored the balance by a mystical essay, intended to show that true Political Economy was based on some of the highest doctrines of school theology. Are these lively eccentricities more reasonable than that of the medieval jurist, who was at the pains to prove that the Blessed Virgin was an adept in the canon law?

But is not the same narrowness of thought discoverable in our society? What a barrenness of general conversation! what a dreary absence of common topics—other than the wretched slipslop gossip and scandal of the day! what a genuine terror and hatred of liberal, masculine talk; such as calls forth the fancy, the humour, the thought, the wit of “educated” minds! What a want of sympathy with men of other callings! What a callous silence, alternating with equally tiresome loquacity on “shop” matters as they are called. These are the results of exclusive professional education.

It may be, and no doubt is, the case that arts and sciences are promoted by men of one idea. The mole is said to see, within its narrow scope, more keenly than any other animal. The smaller the field the deeper it may be dug. A man, employed in boring holes through the boiler plates and nothing else, will bore holes better than the rest of the world; and therefore, if any parent wishes to devote his son to the advancement of any particular branch of study, in the name of reason, let him offer up the victim from his tender years. But those less scientific persons who think that professions were made for men, and not men for professions, and who prefer improving their children to improving the arts and sciences, will decline to sacrifice a son on the altar of Moloch. Surely we shall not be misunderstood; the pioneers of progress deserve our reverence and gratitude; they are heroes and sometimes martyrs on our behalf. But as no education can make a poet or a genius, so neither ought it to try. It has to do with the mass, not the few. It has to fashion minds of the common stamp and not those of heroic energy. *They* need not its aid, their rapid intuitions far outstrip its lagging discourse; they mould the world's teaching and are not moulded by it; so we fear not but science will advance and discoveries be made as

wonderfully as ever, notwithstanding that education may be conducted with a single eye to the improvement of its pupils.

If then liberal studies are not likely to impede our common civilization, do they stand in the way of individual professional success? Is it found as a matter of fact that the educated man is over-matched by the man exclusively trained to his profession? Is it found in real life that the leading men of this age or any age have been nurtured on the niggardly diet of "useful" knowledge? Is it not notorious that that unpleasant class of persons who dub themselves "practical" men, who sneer at every accomplishment that they do not possess, as the evidence of wasted time, and vote every thing they do not understand to be humbug; is it not notorious, we ask, that these persons, vulgar, ignorant, childishly useless as they are out of the groove of their calling, are the most obstinate, prejudiced blunderers even in the matters that they profess to be masters of; the slaves of routine, incapable of understanding the relations of their vocation to others, helpless when a casualty arises for the first time in their experience; parts of men, in short, and not whole men; servile and not free minds; mere animated tools, not thinking artists? Lawyers have a phrase applicable to narrow technical distinctions in their learning; that is the view, they say, of an attorney's clerk. Now, just as an attorney's clerk, who has been bred from his childhood to the desk, the beau ideal in fact of "professional" education, cannot hold his own even in law against an intelligent law student of six months' standing who has been "wasting" his time over Aristotle or Mathematics at the University, so it always turns out in the long run that the man of general mental culture outstrips the man of mere special knowledge. In the dialect of the turf, it may be a long race; the "cocktail" may make play and get a commanding lead, but the clever men know that he cannot last. The thoroughbred creeps up, waits his time, goes by with a rush, and wins in a common canter.

What is this virtue, this secret energy, that distinguishes the educated mind? It is certainly not the possession of any particular branch or branches of knowledge; for it is manifested, and most brilliantly indeed, in the power which it gives of competing with the men of special attainments on their own ground. Probably most of our readers have had occasion to admire the perfect insight with which a successful barrister or leading member of the House of Commons develops some subtle question, it may be of commerce or science or finance, which it is absolutely certain the learned or honorable gentleman has "crammed up" for the occasion—the methodical, luminous, untechnical, yet accurate, elaboration of details that a week since were an unknown region to him, and in

another week will most likely be so again. Observe how interesting and intelligible he makes matters that in the hands of the mere merchant or savant or financier would have been so repulsive, crabbed and pedantic; with what easy, almost playful, power he marshals his newly learned facts, bringing up his battalions like a skilful general so as always to be strongest at the point of attack; how clear his apprehension of what statement really bears on the point at issue; of what needs illustration and confirmation by argument; of what may be passed over in a rapid generalization; of what must be treated with minute accuracy of detail; how neat and full his argument! This admirable power is not any particular knowledge, but the Knowledge of knowledge, the Science of sciences—Philosophy, Method, or whatever may be called that comprehensive architectonic habit of mind which grasps the mutual relations of all special branches of learning. Seated in the centre of human acquirements, it loses no time and wastes no energy, in selecting precisely the mental food which it requires from time to time. It has the clue to the great maze wherein the men of one acquirement are wandering, darkly shut in on either hand by high walls, which only hinder them from seeing, not from dogmatizing. To give this Knowledge, this Power, this Master key of all pursuits, is the object of the highest education; and the ambition of every soundly constituted university. The liberal and generous training which neglects no one of the human faculties; which exercises the judgment by ethics, the taste with criticism, the imagination with poetry, the reasoning powers with logic and history—not as separate dry acquirements, not as an aggregate of discordant units, like the teachers of M. Jourdain in the French comedy, but as a harmonious living organization, entire and one—this broad education of man as man, more or less expands and ennobles every nature submitted to it, “and without teaching him the peculiar business of any one office or calling, it enables him to act his part in each with a better grace and more elevated carriage.”

The writer that we have more than once quoted in this essay, thus admirably describes the effect of liberal education—which he identifies with Philosophy—on its élèves:—

“That training of the intellect which is best for the individual himself best enables him to discharge his duties to society. The Philosopher indeed, and the man of the world, differ in their very notion (we would venture to add that they are complementary to each other, and that complete men combine the two characters); but the methods by which they are respectively formed are pretty much the same. The Philosopher has the same command of matters of thought which the true citizen and gentleman has of matters of business and conduct. If then a practical end must be assigned to a university course, I say it is that of training

good members of society. Its art is the art of social life, and its end is *fitness for the world*. It neither confines its views to particular professions on the one hand, nor creates heroes or inspires genius on the other. Works indeed of genius fall under no art; heroic minds come under no rule; a University is not a birthplace of poets or of immortal authors; of founders of schools, leaders of colonies, or conquerors of nations. It does not promise a generation of Aristotles or Newtons, of Napoleons or Washingtons, of Raphaels or Shakspeares; though such miracles of nature it has before now contained within its precincts. Nor is it content, on the other hand, with forming the critic or the experimentalist, the economist or the engineer, though such too it includes within its scope. But a University training is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power and refining the intercourse of private life. It is the education which gives a man a clear conscious view of his own opinions and judgments, a truth in developing them, an eloquence in expressing them, and a force in urging them. It teaches him to see things as they are, to go right to the point, to disentangle a skein of thought, to detect what is sophistical and to discard what is irrelevant. It prepares him to fill any post with credit, and to master any subject with facility. It shows him how to accommodate his mind to others, how to throw himself into their state of mind, how to bring before them his own, how to influence them, how to ~~con-~~ <sup>deal</sup> with them. He is at home in any society; he has common ground with every class; he knows when to speak and when to be silent; he is able to converse; he is able to listen; he can ask a question pertinently, and gain a lesson seasonably when he has nothing to impart himself; he is ever ready, yet never in the way; he is a pleasant companion and comrade you can depend upon; he knows when to be serious and when to trifle; and he has a sure tact which enables him to trifle with gracefulness and to be serious with effect. He has the repose of a mind which lives in itself while it lives in the world, and which has resources for its happiness at home when it cannot go abroad. He has a gift which serves him in public and supports him in retirement, without which good fortune is but vulgar, and with which, failure and disappointment have a charm. The art which tends to make a man all this is in its idea as useful as the art of wealth or the art of health; though it is less susceptible of method and less tangible, less certain, less complete in its result."

"It is less susceptible of method, and less tangible, less certain, less complete in its result;" this is acutely and truly said. We recognise at first sight the good surgeon, the brilliant scholar, the clever machinist, but not so easily the man of educated mind. His power is rather felt than seen, and more appreciated in its effects than in its operations. Hence, the vulgar, whose dull eyes look no further than to present results, neither value nor indeed recognize the existence of the prime energy that works so mysteriously in educated men. Hence the cruel and senseless system of setting down children to learn a business that after years of painful toil they can only imperfectly acquire, and wherein all their real progress, miserably empirical as it is, takes place after their youth has passed away.

If it be enquired, what circle of studies forms a liberal curriculum? the answer is, that it depends on the age and on the general temper of society. Herodotus tells us, that the old Persians (or Parsees as we feel tempted to call them) taught their children to sit a horse, to draw the bow, and to speak the truth. This simple trivium of manly accomplishments which, we avow, we regard with a certain sneaking affection, they thought adequate to fit a youth "to perform justly, skilfully, and magnanimously, all the offices both private and public of peace and war." The Greeks acknowledged the various claims of grammar, music, mathematics, and eloquence, as a foundation whereon they reared the stately fabric of their immortal philosophy. The Romans strengthened this somewhat too æsthetic course by the robust discipline of their civil law—that noble jurisprudence which has survived all the shocks of barbaric invasion, ecclesiastical censure, Lutheran denunciation, and national prejudices; which to this day forms the basis of European Public and Private Right, which is a philosophy and an education in itself, and which, we are delighted to think, is now being re-introduced into Oxford where it was formerly cultivated with such enthusiasm and success. The middle ages, imitating the ancients, agreed upon a Trivium and Quadrivium of liberal studies, which after their manner they twisted into memorial verses.

Gram. loquitur Dia. vera docet. Rhet. verba colorat.

Mus. canit. Ar. numerat Geo. meditatur Ast. petit astra—

Grammar, Dialectic, Rhetoric, Music, Arithmetic, Geometry, Astronomy. And these names still remain in the Quadrangle of the "Schools" at Oxford, inscribed each in golden letters over the door of the School allotted to it. But they no longer represent a truth. The Trivium and the Quadrivium are forgotten. After the Reformation the University life of Oxford became gradually absorbed in the College life. Tutors superseded professors, and an Oxford education, until the commencement of the present century, meant just what the student managed to pick up in the particular society to which he belonged. A University degree came to be a guarantee of three years residence and nothing more. That under this voluntary system men of eminent abilities, in every walk of life, were reared, is evident by a cursory examination of English history, but it is no less true that the University, as such, had committed a shameful dereliction of duty. During the last fifty years, however, a new spirit has been infused into the Alma Mater, and the system of examination for Degrees inaugurated, under which the coveted distinctions of first, second, third and fourth "classes" denote the children whom she has delighted to honor. Until the last changes of

all, there were two "honor schools;" one, *In Literis humanioribus*, commonly called Classics, that is to say the language, the history, the literature, and the Mental and Moral Philosophy of Greece and Rome; the other, *In Disciplinis Mathematicis et Physicis*, or pure and applied Mathematics. To these have now been added a School of Jurisprudence and Modern History, and another of Physical Science. How the new system of four honor Schools will work, remains yet to be seen; we feel inclined to predict that the School of Jurisprudence and Modern History will be more successful than that of Physical Science; but that the old *Literæ humaniores* will be still the great favorite, and characteristic ground of the Oxford system.

Experience has shown that poetry, eloquence, logic, philosophy, and history form a singularly harmonious and practical training, and many circumstances combine to point at Greek and Latin literature as containing that course of study in the most condensed, most brilliant, and convenient form. The advantage, moreover, of studying through the medium of another language has so much impressed the present arbiters of Educational questions, not in England alone but throughout the civilised world, that it is unlikely, for a considerable time at least, that the view of University students as to the pre-eminent merits of the classics will be much changed.

The result will be determined by nature and not by the University. Men will in the first place covet distinctions which represent excellence in the training that is most valued by the world, and then, those that are attached to their favorite studies. However things may arrange themselves, at all events there will be no excuse, even *prima facie*, for charging Oxford with neglecting any great branch of human acquirements in her dispensation of honors. It is not she, but society in general, that will be to blame, if the comparative value of those honors is wrongly estimated.

If we have not sufficiently indicated our opinion, we express it here, that a University is intended to teach that ample Philosophy which is the Porch of all the sciences, and that it does its will completely or incompletely according to the universality of its mental culture. We consider therefore that it ought, if it fulfils the idea of its constitution, neither to neglect the grounds of physical science nor of mental science, neither moral philosophy nor æsthetic philosophy, neither the history of man nor the history of things. The natural order seems to be, first, the formal or instrumental studies, such as logic and grammar; then a broad survey of the human achievements in science, eloquence, art and philosophy, by the aid of what may be called "representative books;" and lastly, the special studies requisite for professional life. No university yet has gone so far as to include all this, but we think we see signs that

the ignoble strife between various branches of study is gradually giving way to a wider and more philosophical view of the present needs of education. Oxford has fairly fulfilled the earlier stages of training, presenting in this respect a wholesome contrast to certain new-fangled Polytechnic academies. She turns out men furnished, if not with vast information, yet with a high and well formed standard of accuracy, taste, and judgment—admirably fitted for further harmonious study, but she leaves them to pursue that further study at discretion. In the present day no person of liberal education and average intelligence will consent to be behind the rest of the world, or to be ignorant of what all other educated persons know; but it is not less true that whatever is capable of being learned—*omne scibile*—should find a home in one of her many mansions.

We suppose that some of our readers have been on the watch during the course of these observations for a display of classical prejudice. We have no desire whatever to conceal our opinions, which give the pre-eminence to the *Literæ humaniores* over, though not to the exclusion of, the other schools; but we cannot undertake to argue the point. As regards the value of classical studies in liberal education, controversy, if it ever seriously existed among persons entitled to have an opinion on the subject, is now over. All who are recognised by the world as capable of *thinking through* educational questions, (we refer especially to the German authorities) have made up their minds.\*

Two classes of men must be excluded from criticising a study; those who know nothing of that study, and those who know it, but nothing else. For no discovery, as Lord Bacon tells us, can be made on a flat or level. A mere scholar, such as the world (most ignorantly, by the bye) considers Dr. Parr, is as tiresome and narrow and incapable of judging of the merits of his hobby as a mere divine, or a mere naturalist, or a mere literary man. But on the other hand a man without classical learning, (like Cobbett) has no title whatever to decide as to its power in mental culture—*οὐκ ἀδικαίωτος γὰρ αὐτὰ κρίνει*—he is bribed to his verdict. Besides, he can know no more about it than a blind man about colors. It will be time seriously to doubt the value of the lore that has formed nearly every commanding mind in modern history, when a sound scholar shall declare to the world that he is not the better for his Greek and Latin literature, and that he regrets the time spent in acquiring it.

\* "That Classical studies should be the basis of intellectual teaching he (Dr. Arnold) maintained from the first. 'The study of language,' he said, 'seems to me as if it was given for the very purpose of forming the human mind in

We are not speaking now of mere philology, highly as we esteem it as introductory or propædæutic to the more genuine university

youth; and the Greek and Latin languages, in themselves so perfect, and at the same time freed from the insuperable difficulty which must attend any attempt to teach boys philology through the medium of their own spoken language, seem the very instruments by which this is to be effected. But a comparison of his earlier and later letters will show how much this opinion was strengthened in later years, and how, in some respects, he returned to parts of the old system, which on his first arrival at Rugby he had altered or discarded. To the use of Latin verse, which he had been accustomed to regard as 'one of the most contemptible prettinesses of the understanding,' 'I am becoming,' he said, 'in my old age more and more a convert.' Greek and Latin Grammars in English, which he introduced soon after he came, he found were attended with a disadvantage because the rules which in Latin fixed themselves in the boy's memories when learned in English were forgotten. The changes in his views resulted on the whole from his increasing conviction, that 'it was not knowledge, but the means of gaining knowledge which he had to teach'; as well as by his increasing sense of the value of the ancient authors," &c.—Stanley's Life of Dr. Arnold, p. 106.

Sir William Hamilton thus determines the claims of natural science as compared with the Humanities in an educational course.

"But beside the more arduous studies, which prepare for others, and more powerfully exercise the mind; and besides the instructors and examiners competent to promote thinking, and to pitch high the standard of intellectual attainment; there is to be considered another class of sciences with their teachers,—the Physical to wit. These sciences—easy and attractive in themselves, and which, as commonly cultivated to some extent at least, it is even disgraceful not in some degree to know,—require for their profitable study in private, the public exhibition of costly experiments, apparatus, and collected objects. This exhibition a University ought to supply; and, at the same time, as a necessary concomitant, a competent monstrator. As amusing, popular and facile in themselves, these sciences need no external stimulus; and as not the conditions of progress, either objective or subjective, it would be even an inversion of the prime purpose of a University, in its general faculty, to apply it. In these, all that a University can safely require, is a certain amount of proficiency. Its honors, at least its higher honors, should be reserved as an encouragement to the more invigorating and fundamental studies; but which, if less popular, and for a time more irksome, are, if not externally—if not peculiarly promoted, sure to be neglected. At the same time, there is always a considerable number, a majority even of its alumni, incapable of progress in the higher departments, but whom it is not right in a University, as *alma mater*, altogether to neglect. To these who would otherwise be left to idleness and its consequences, the physical sciences present an attractive and not unimproving object of occupation. As Augustin says:—'*Patiantur aquilæ dum pascuntur Columbæ*.' The doves, however, should not be tended to the neglect of the eagles. To discover and to reel to unity, in Physics as in Mathematics, require inventive ingenuity and general ability;—though Bacon certainly asserts, in commendation of his method of discovery, that it actually 'levels the aristocracy of genius.' But in either, merely to learn what has been already detected and detailed calls out, in the student, the very feeblest effort of thought, consequently these studies tend the least to develop the understanding; and even leave it, for aught that they thus effect, in a state of comparative weakness and barbarism. But as the many, not incoherent of this, have no conception even of a higher cultivation, the Universities, if conformed to popular views, would be abased to the very lowest.

*Fallitur et fallit, vulgi qui pendit ab ore."*

Again, "The natural sciences are essentially easy; requiring comparatively



studies. It is a gymnastic training, which enables the mind to walk freely and gracefully amid the treasures of the ancient world. If the pupil fresh from school is not allowed to make use of his philology to unlock that wonderful literature, his school days have indeed been as unfruitful as Jacob's seven years' service; but the remedy is, not to retrench, but to develop, his studies.\* We have heard some persons speak as if Oxford did no more than provide for a power of correct translation and retranslation from Greek and Latin and a skill in composition. It may have been so perhaps in some remote age the dismal tradition whereof is still cherished by old women, but it has certainly not been so in our time. Indeed, with the present range of books it is hardly possible. One cannot conceive how a tutor could manage to take his pupils through the *Ethics* and *Rhetoric* of Aristotle, or the history of Thucydides or Tacitus, with a mere critical philological spirit. It would require

little talent for their acquisition. Their study therefore does not cultivate the mind. As Bacon remarks of induction applied to physical pursuits :—

*Nostra facinorandi scientias exæquat fere ingenia, et non multum excellentiæ eorum relinquit.* . . . *Hæc nostra, (ut sæpe diximus) felicitatis ejusdam sunt potius quam facultatis, et potius temporis partus quam ingenii.* (N. O. I. § 122) In thus honoring the easy and amusing, equally with the difficult and painful, our Alma Mater imitates the nurse who would bribe the child by the same reward to a dose of bitters or to a sugar plum."

The very unfavorable opinion formed by this eminent writer and great authority of the study of Mathematics as a mental discipline, when carried beyond a moderate extent, is well known. We can find no passage sufficiently condensed and full for extraction.

It may be regarded as a sign of re-action in favor of the old European system of liberal education, that at the inauguration (in 1852) of Owen's College in democratic progressive utilitarian Manchester, the Principal can venture to lecture on the importance of the classics, both as a discipline of the mind, far superior to any modern languages, and as opening stores of invaluable knowledge. "With in a bulk of comparatively small extent we have the works of poets, historians, and orators, who have been, by common consent, treated as models of successful composition. In the same works we see completely unfolded to us the history of some of the most momentous events the world has seen,—events full of instruction for the statesman, interest for the student, and of warning and wisdom for us all. For it must not be supposed that the passions and struggles, the triumphs and failures, of Greece and Rome have no significance for us. The heart of humanity is much the same in all times; the wants that call for national laws and institutions, the dangers that threaten, and the obstacles that thwart them, will not vary much. Some allowances must of course be made for variations of race, climate and religion; and this very necessity will introduce a new and most valuable element into the study."

We perhaps ought to apologise for the great length of this note, but we were anxious to show that an appreciation of classical studies is not confined at the present day to the cloisters of a bigoted University.

\* We fully admit the absurdity of teaching a smattering of Latin and Greek to boys whose education is intended to end at the age of 15 or 16. Here we are only speaking of University students.

a power of cold abstraction as potent as that of the savant who could

Peep and botanise  
Upon his mother's grave.

The fact is that Aristotle, Plato, Thucydides, Livy and others of the classics, as read at Oxford, imply an amount of collateral study of Bacon, Butler, Reid, Sir Wm. Hamilton, Mill, Grote, Bentham, Niebuhr and so forth, as well as of the floating traditional teaching which we hold to be still more valuable than any book-learning, that amply vindicates the University from the idle charge of narrow philological sympathies. Curiously enough indeed, considering the vulgar view of our Universities as representing Classics and Mathematics respectively, philology, regarded as an acquirement *per se*, is rather honored at Cambridge than at Oxford; so little are the majority of mankind at the pains of ascertaining the truth of their impressions. Oxford is emphatically the *philosophical university*. We will not leave our assertions without support from authority. Dr. Arnold, it is well known, was violently, almost bitterly, opposed to the theological movement which took place in Oxford twenty years ago. It is no exaggeration to say that it would have broken his heart if his son had yielded to the influences which he dreaded and detested so much. He was also fully alive to the exceeding probability of a boy at the University falling into the tone predominant at the place. *Aristotle* turned the scale for Oxford against Cambridge. "We have been reading some of the Rhetoric in the 6th form," he says, "and its immense value struck me again so forcibly that I could not consent to send my son to a University where he would lose it altogether, and where his whole studies would be *formal* merely and not *real*, either mathematics or philology, with nothing at all like the *Aristotle and Thucydides at Oxford*." That great school master and good man, the very representative of "liberal" educational views, learned at Oxford to speak in the manner of the ancient authors, and learned moreover, at a time when the Education of the University was far more Scholastic than it is at present, to protest, in the teeth of his party sympathies, against the vulgar outcry raised against the classics by the "useful knowledge" sect—on the ground which he then, and all Oxford bred men now, feel, that the classical writers practically belong to a period of *modern civilization like our own*; "that in them, with a perfect abstraction from the particular names and associations which are for ever biasing our judgment in modern and domestic instances, the great principles of all political questions, whether civil or ecclesiastical, are perfectly discussed and illustrated

with perfect freedom, with most attractive eloquence, and with profoundest wisdom."

This indeed is the great secret which explains how a few writers in two dead languages have gained a hold on the world, which seems every day to increase in strength. They—we speak of their leading minds—have the quality which we justly ascribe to Shakspeare; they wrote "for all time;" they were men, *purs et simples*, and nothing human is alien to them. Like their statues, they can never be out of fashion, for they have never been indebted to the tailor or the milliner. So long as we honor sound judgment, as we marvel at speculative profundity, as we burn with poetic thought, as we view with satiric or sympathetic humour the manners of our fellow creatures, so long in short as we have the faculty of weeping or laughing—just so long, the power of communing with the great orators and poets and philosophers and wits of Greece and Rome will be a source of purest discipline and most unaffected pleasure; and as for those who gratify their spleen and indemnify themselves for their ignorance, by attempting to sneer at the language and literature of Homer and Horace, as "dead,"\* "obsolete," and so forth, we can only represent their intellectual imbecility by comparing them to the idiot, who should complain that the stars were too old, the blue sky too monotonous, geometry too true to be worthy objects for the wonder, the admiration, and the discipline of the nineteenth century. New sciences may achieve marvels of discovery and open to us new kingdoms of the World Without: the World Within will not, cannot change. Amid the Protean revolutions of nature, Man is ever the same; the landmarks of his development—the truths proclaimed at Sinai, Calvary, Athens, Rome,—can never be swept away or forgotten. While men are human they will cherish the old "humanities," without which literature becomes rough, philosophy is material, and religion is apt to be devil worship.

Our task is ended. We have attempted—we are well aware how imperfectly—to sketch some of the features of our venerable Nursing Mother which we remember most pleasantly and fondly. That we should find perfect sympathy from those who have not been bred in her courts is hardly to be expected. But if we dwell on the virtue of her training, it is rather with remorse and self-abasement than in a spirit of boastfulness. We are thankful for the nurture she so liberally offered, but which we did not then value as we do now. We accuse our slothfulness, in praising her zeal; and we may surely

\* Is it not astonishing that any one should be deluded by an argument that would make Greek of less value than Gujaratee?

be allowed to confess so much without meeting an unkindly construction. None of her sons, if he be honest, can take up the stone to cast at her. That Oxford does not perfectly carry out her own ample theory of teaching may well be admitted, but at least she has been advancing steadily without losing a single step once gained. That she falls short of some ideally perfect school, existing in conception only, is very probable, and easy to argue; it is not so easy to point out the actual rival that is to dethrone her from her present state. At all events it is matter of experiment, not of theory. The tree is known by its own fruits. The fruits of Oxford are her sons. They must be judged of, not by a specimen taken at random here and there, but by a large discriminating induction of men of various tempers, talents, occupations, and ranks, informed by a patient, truth-seeking, candid spirit. If after such an enquiry any one deliberately prefers the stamp of men educated under some other system, he is freely welcome to his taste. It would be the height of arrogance to attempt to dictate *his* opinions, and we hope we may without offence claim equal forbearance for our own. Only we beg that the question may be fairly put, that is, as a question of fact; not, what the result of Oxford teaching ought to be, but what it is. Are Oxford men mere Latin verse-writers, and construers of Greek plays? Or are they as well informed on general subjects, in modern history, in languages, in the current events of the day, as liberal in their notions, as capable of success in new vocations, as genial and masculine in their tastes, as the best men who decline the sour grapes of a classical training? This is the issue that has to be decided; and it can only be decided by the homely test of observation. We have no desire to intrude our own conclusion.

But to those who can look back at a youth spent in her halls and cloisters, we say, cherish those kind recollections; O cherish them. In the din and bustle of the world you mind them not, but they are a *κρημα νικ αει*, a possession for ever. When you have become sick of this wretched money-getting life, with its meannesses, and jealousies, and acted lies; when you have ceased to relish vulgar pleasures and trashy literature; when declining years shall bring with them their natural gravity, humbled, as mostly befalls, by disappointment and saddened by loss of friends; in that sober autumn of your days, your College youth will surely come back to you, and you will love to dwell on the happy innocent boyish life, its sports and studies, its pure triumphs, its wholesome humiliations, its generous rivals, and its partial friends. And among those friends, such is the magic of memory, will rise before you, not unrecognised, the stately figures of dim antiquity, the glorious rhapsodist, the good old au-

nalist, the keen-eyed historian, the far seeing sage, the wit and man of the world—Homer, Herodotus, Thucydides, Plato, Aristotle, Horace—the discipline of your youth, the delight and consolation of your old age. Then you will be pleased again to pore over the well remembered page, to harmonize the ancient world with that of Shakspeare and Bacon, to extricate from their caskets those precious gems of eternal truth, that the attrition of ages has only served to polish to a brighter sparkle. And you will soon how well an eloquent pen of our own day describes

“The feeling that a man of liberal education naturally entertains towards the great minds of former ages. The debt which he owes them is incalculable. They have guided him to truth. They have filled his mind with noble and graceful images. They have stood by him in all vicissitudes, comforters in sorrow; nurses in sickness, companions in solitude. These friendships are exposed to no danger from the occurrences by which other attachments are weakened or dissolved. Time glides on; fortune is inconstant, tempers are soured, bonds which seemed indissoluble are daily sundered, by interest, by emulation, or by caprice. But no such cause can affect the silent converse which we hold with the highest of human intellects. That placid intercourse is disturbed by no jealousies or resentments. There are the old friends as it were never seen with new faces, who are the same in wealth and in poverty, in glory and in obscurity. With the dead there is no rivalry. In the dead there is no change. Plato is never sullen. Cervantes is never petulant. Demosthenes never comes unseasonably. Dante never stays too long.”

It is time to shut up the little drab volume with its lists of graduates and benefactions, which has made us so ridiculously sentimental. We part from the Alma Mater with our good wishes.—*Floreat.*

Since writing the above we have received a volume published early in the present year, consisting of Essays on various subjects by members of the University of Oxford.\* One, and the most important, of them is entitled “Oxford Studics,” and is contributed by the Rev. M. Pattison, Senior Tutor of Lincoln College, a little society which has during the last few years gained itself great distinction for intellectual activity both in and out of the “Schools.” Mr. Pattison’s evidence given before the University Commission was justly considered as most valuable, and stamped him as one of the very few persons who had thoroughly comprehended the question of University reform in all its breadth. We therefore read his Essay with great interest and were not disappointed. It contains the results of many years’ patient reflection, informed by a liberal philosophical spirit, and based on an ample practical knowledge of facts. “Close woven” as it is “in matter, form and style” it will not bear hasty perusal

—it requires and deserves study and thought. Moreover, the general reader must remember that it is not addressed *ad populum* but *ad clerum* —it contains the views of an enthusiastic reformer, couched sometimes in the vigorous language of controversy, though he disclaims party feeling, and adapted to the knowledge and temper of an audience not always favorably disposed to his doctrines. When therefore he sharply censures University shortcomings, and launches merciless sarcasms at the academical conservatives, we must not take him too literally, or we should make the blunder that foreigners do when they fancy “the sun of England has set for ever,” because they read assertions to that effect in the reported speeches of opposition orators.

We believe that there is an essential harmony between Mr. Pattison's views and those expressed in the foregoing pages, even where at first sight they may seem to differ. He recognises and traces with truth and humour the great literary and philosophical movement that has regenerated Oxford in the present century. He admits, in the course of some bitter remarks on the torpid life of the University up to that happy revival, that “many excellent influences flowed from Oxford, many good men imbibed wisdom and holy inspiration, if not from her studies at least from their own studies within her precincts, even during this long period of her captivity.” On the theory of liberal education and its value his views are full and comprehensive. He elaborates the true doctrine, which we have endeavoured to explain above, that we ought to educate the mind for its own sake, independently of professional training, and he marshals the claims of disciplinal, liberal, and useful studies with admirable insight. We make no apology for quoting from his pages matter which we would gladly have incorporated with our own, if we had had the opportunity of strengthening our positions by the use of so respectable an authority. He lays down that “neither the training nor the information, neither the disciplinal nor the practical studies, will satisfy the requirements of a perfect human culture, till there be reared upon them, as the roof and crown towards which all the parts of the building converge, a true and informing Philosophy.”

He explains what he means by Philosophy :—“Useful acquirements and a vigorous discipline limit the horizon of the best popular idea of education. *Enlargement or enlightenment of mind* it does not conceive as an object.”

He hopes, however, that the English Universities will achieve the triumph of setting up the Science of sciences on her legitimate throne. One reason for such a hope he finds in the advance that Philosophy has already made of late years in Oxford ; another

in the growing conviction of our generation of the value of *mental enlargement*—even though they estimate it “*not at all on its true ground as valuable in itself and for eternity, but for its practical utility.*”

“To this the Indian Civil Service reporters appeal when they say: ‘It is undoubtedly desirable that the Civil Servant of the Company should enter on his duties while still young; but it is also desirable that he should have received the best, the most liberal, the most finished education, that his native country provides. Such an education is the best preparation for every calling which requires the exercise of the higher powers of the mind.’ And Mr. Roundell Palmer goes still further: ‘Of the value of an academical education, even in a strictly professional point of view, when given on a sufficiently comprehensive system, I entertain no doubt. Superior mental cultivation tells very much in every profession; it enlarges the views, improves the judgment, and obtains for its possessor consideration and influence in the ordinary intercourse of mankind. It may not introduce a man to business at the beginning of his career, but when he has begun to rise, it helps him to advance more rapidly than he otherwise would, it adorns and dignifies his success; and it qualifies him for any elevation in the social scale to which that success may lead.’ More theoretically, but to the same purpose Mr. Davison wrote: ‘Of the intellectual powers the judgment is that which takes the foremost lead in life. How to form it to the two habits it ought to possess, exactness and vigour, is the problem. It would be ignorant presumption so much as to hint at any routine of method by which these qualities may with certainty be imparted to every or any understanding. Still we may safely lay it down that they are not to be got by any ‘gatherer of simples’ but are the combined essence and extracts of many different things, drawn from much varied reading and discipline first, and observation afterwards. For if there be a single intelligible point on this head it is, that a man who has been trained to think on one subject, or for one subject only, will never be a good judge even in that one; whereas the enlargement of his circle gives him increased knowledge and power in a rapidly increasing ratio. So much do ideas act, not as solitary units, but by grouping and combination, and so clearly do all the things that fall within the proper province of the same faculty of the mind, intertwine with and support each other. Judgment lives as it were by comparison and discrimination. Be it understood that by ‘judgment’ is now meant, not that homely, useful quality of the intellect that guards a man from committing mistakes to the injury of his fortunes or common reputation; but that master principle of business, literature, and talent which gives him strength in any subject he chooses to grapple with, and enables him to seize the strong point in it.’ What Davison in this passage calls ‘judgment’ is what we have called the philosophical spirit—a power of judging of every object or event on its true ground and nature, and not from some casual association, accident, prejudice, or the habits and conventionalities of the day.”

Mr. Pattison also recognises the truth of our opinion stated above, that the division of labour, which has been one great secret of our material prosperity, has had a degrading effect on our intellectual character.

“Our national excellences have all been of the material, mechanical, practi-

cal sort; good sense, vigour, determination, readiness. And with these we have triumphed in competition with nations which have been deficient in them. But already we are beginning to find our wealth, population, and materials too vast for our capacities of system. We have no system in any thing; our affairs go on by dint of our practical sense; a stupid precedent supplying on all occasions the place of method. We are unable to organize our labour market or our commerce; to codify our law; to administer any one department on a principle of management; and every Act of Parliament that is passed presents a laughable array of puzzling contradictions. We can build more solidly, durably, quickly, than at any former time, but we have no architecture; we add room to room but cannot lay out an interior. All our arts of design are mere copying from patterns. We have brave and enduring soldiers; officers of resolution and skill, but no generalship. We have the stores and supplies of war in profusion, no capacity for organising a commissariat. There is a corresponding deficiency in our education. We have some excellent discipline in practical life, in public schooling, in the energy of our trade; we have no systematic education. All this is beginning to be understood and felt; and there is a remedy. The necessary tendency of advancing civilization is to divide and subdivide the applications, as of labour, so of thought. The professions tend to split up into branches; and skill in one becomes more and more incompatible with skill in another. The more a subject has been explored, the more time does it take each succeeding student to follow the steps of his predecessors. To prevent the disabling effects of this speciality of pursuit, it becomes the more requisite to secure at starting a breadth of cultivation, a scientific formation of mind, a concert of the intellectual faculties."

He explains that the education given at a University aims at Universality—that the knowledge acquired there is not to be valued for itself or its immediate application to practical purposes, but for its effect on the mind. He condemns the theory of the "useful knowledge" school, but with the moderate language of a man writing to Oxford readers who have always anathematized that heresy and require no further exhortation on the subject. Again, he fully supports our views on the proper end and object of a University. "It may be," he says, "the home and nurse of learned men, it may promote the progress of science, it may qualify for the learned professions. None of these are its true or primary purpose. If science be promoted by a University, well and good; but such promotion is not to be required of it. Academies or learned societies are for the furtherance of special sciences. In France the Institute performs this office well, even while the University is extremely deficient. The promotion of their science is the sole end of such societies; but in a University every science sinks into a means to a worthier—the cultivation of mind. This is the one use to which it puts knowledge, the light in which it regards science. The products of a University are not inventions, improvements, discoveries, novel speculations, books, but the fully educated man, the *περί πᾶν πεπαιδευμένος*. Its one great achievement is that philosophical spirit, which has been finely described as 'un-talent



acquis par le travail, et par l'habitude, pour juger sainsment de toutes les choses du monde. C'est une intelligence à qui rien n'échappe, une force de raisonnement que rien ne peut ébranler, un goût sûr et réfléchi de tout qu'il y a de bon ou de vicieux dans la nature. C'est la règle unique du vrai et du beau."

Mr. Pattison fully recognises the value of "classics," not only in the ample Oxford sense of the word (or the "*Literæ humaniores*" to use the language of the statutes), but in its ordinary literary signification. It is only those, he pithily says, who are not scholars themselves, that question the utility of classical studies. "It is natural," according to a great Edinburgh reviewer, "that men should be inclined to soothe their vanity with the belief that what they do not themselves know is not worth knowing; and that they should find it easy to convert others, who are equally ignorant, to the same opinion is also what might confidently be presumed. 'Ce n'est, pas merveille, si ceux que n'ont jamais mangé de bonnes choses, ne savent que c'est de bonnes viandes.' " We believe Mr. Pattison would fully agree (though his *opposition* line of argument makes him chary of admissions in favor of the classicists) with Sir William Hamilton's opinion (vide his review of Pillans's defence of classical studies,) of "the importance of philological pursuits in the higher cultivation of the mind," and would admit the soundness of his statement, that "where classical learning has been vigorously cultivated, the most powerful attacks have only ended in the purification and improvement of its study. In Germany and in Holland, in Italy and even in France, objections, not unreasonably, have been made to an exclusive and indiscriminate classical education; but the experimental changes they determined, have only shown in their result, that ancient literature may be more effectually cultivated in the school, *if not cultivated alone*; and that whilst its study, if properly directed, is, absolutely, the best means towards an harmonious development of the faculties—the one end of all liberal education; yet that this means is not always, relatively, the best when circumstances do not allow of its full and adequate application."

The only point on which we should have wished for more definite explanation from him is to what extent would he introduce the physical sciences into the curriculum. The inductive system must of course be thoroughly mastered as the groundwork of all experimental philosophy, and it should be illustrated from an ample variety of the special branches of natural laws. But would he introduce those special branches as substantive portions of an academic course? and if so, how many and to what extent of accuracy? The *universal knowledge* of a University is certainly

not a smattering of everything, which would rather deserve the name of universal ignorance. It would be preposterous on the other hand to expect the student to acquire the whole cycle of the sciences in their fulness, whatever length his academical course might be protracted to.

His language is rather vague on this point, though always sound as far as it goes. He lays down broadly that Philology is imperfect, taken by itself. "At the same time a purely scientific education, without the emollient graces and amenities of literature, is apt to generate a harsh, unpliant character to the intellect." But when he passes to positive precepts we confess we are not clear as to his meaning. He wishes to instal in the schools "a general philosophy of the laws of knowledge, but based on a combination of the recorded history of speculative thought (especially the Greek epoch) with *the extant condition of the special sciences*." What do the italicised words mean? That Mr. Pattison could, if he chose, be explicit we have no doubt whatever. That he is withholding his opinion in deference to the prejudices of the liberal party we do not like to think. The man who could write as he has written is not to be supposed capable of being carried away by the polytechnic utilitarian cry of the day. He distinctly and invariably rests the value of *material knowledge* in the higher education, not on its merits as an useful acquirement, but on its philosophical character, *i. e.* its applicability to intellectual culture.\* He must therefore abhor smatterers, and yet his words above quoted would seem to imply that the student should be forced to "cram up" the last researches in every science, from Astronomy to Botany. We say deliberately that he does not and cannot mean this. That he expects a great deal more, however, from the University scholar than has ever yet been required, is clear. Such is the natural bent of an energetic tutor whose own powers of intellectual digestion are so potent that he can have little sympathy for weaker stomachs. His concluding remarks seem to us to indicate a faint misgiving as to the danger of overworking the young men under the new system. With these observations we commend this remarkable essay to all who desire to make themselves acquainted with the present state of the question as to liberal education, and the spirit of the leading men at present engaged in tuition in our University.

\* We ought to remember ourselves, he says, and inculcate on others, that intellectual character, and not the acquisition of facts, is the true preparation for life.

















